

Expeditions 1982, 1983 and 1984 of Geneva Natural History Museum in Nepal. Anisotomini (Coleoptera, Leiodidae)

by

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With 130 figures

ABSTRACT

Descriptions and/or collecting data are presented for 55 species (2083 specimens) of *Anisotoma* and *Agathidium* from Nepal, including the first known species of *Anisotoma* from SE Asia and the first known species of *Agathidium* (*Cyphocele*) from Himalaya.

New descriptions: *Anisotoma loebli* n. sp., *Agathidium glabrum* n. sp., *A. pseudoconfusum* n. sp., *A. oculatum* n. sp., *A. dissimile* n. sp., *A. acuminatum* n. sp., *A. conspersum* n. sp., *A. confluens* n. sp., *A. kuwapanicum* n. sp., *A. variabile* n. sp., *A. lividum* n. sp., *A. bidentatum* n. sp., *A. tridentatum* n. sp., *A. ovatum* n. sp., *A. macrotibiale* n. sp., *A. godawaricum* n. sp., *A. gracile* n. sp., *A. elegans* n. sp.

New records for Nepal: *Agathidium kumaonicum* Ang. & Dmz., *A. khasicum* Ang. & Dmz., *A. indra* Ang. & Dmz., *A. tonkinense* Ang. & Cooter.

INTRODUCTION

This contribution deals with the Anisotomini collected during the following expeditions in Nepal promoted by the Geneva Museum:

23.III-22.IV.1982, leg. Drs A. & Z. Smetana, 23 loc., 546 ex., 22 spp.;

12.IX-20.X.1983, leg. Drs I. Löbl and A. Smetana, 15 loc., 430 ex., 27 spp.;

31.III-30.IV.1984, leg. Drs. I. Löbl & A. Smetana, 34 loc., 1102 ex., 39 spp.;

and it includes also data on 3 ex., 2 spp., found by Dr. P. Cassagnau (exp. IX.1977

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and X.1981) and 2 ex., 1 sp., found by Dr. J. Martens in the same region.

Besides 18 species new to science and 4 new records for Nepal, the study of this material has yielded interesting reports as follows:

- a) the first known species of *Anisotoma* from SE Asia;
- b) the first known species of the subg. *Cyphoceble* from Himalaya;
- c) further 2 new species of the subg. *Neoceble*, which is rather uncommon in Himalaya;
- d) further 3 new species of the subg. *Microceble*, of which we knew only 6 species from Himalaya;
- e) males or females of certain species, of which we knew only the opposite sex; including females of *A. taru* Ang. & Dmz., which have given the first instance of sexual antennal dimorphism in the tribe Anisotomini.

The specimens are deposited in the Geneva Museum (GM) and Angelini's collection (AC).

We are obliged to Dr. C. Besuchet, Curator of the Geneva Museum, for the loan of the material and its generous assistance in editing the present paper.

Anisotoma loebli n. sp.

Fig. 1

Length 2.45 mm (holotype ♀). Dorsum uniformly black; venter black; antennae testaceous, black at segments 6-11; femora and tibiae black, tarsi reddish-brown. Microreticulation absent on the whole dorsum. Punctuation impressed on head and elytra, superficial and sparse on pronotum; elytra without clear series of punctures.

Head: Punctures small but impressed, spaced from each other by 1-4 times their own diameter; some larger punctures are interposed. Clypeal line fine but distinct. 3rd antennal segment 1.3 times as long as the 2nd and shorter than 4th + 5th (fig. 1). Hamann's organ: gutter with 2 vesicles in both 9th and 10th antennal segments, gutter without vesicles in the 7th segment.

Pronotum: Punctures smaller than those of head, spaced from each other by 6-10 times their own diameter. 1.9 times as broad as head, very transverse ($W/L = 2.14$) and slightly convex ($W/H = 2.18$). Holotype: length 0.56 mm, width 1.20 mm, height 0.55 mm.

Elytra: Punctuation somewhat irregular; punctures large and impressed, spaced from each other by 1-6 times their own diameter; rare smaller punctures are interposed; longitudinal series of 5-6 punctures are vaguely recognizable. Sharply broader than pronotum, as broad as long and moderately convex ($W/H = 1.61$). Sutural striae sharp, extended within the apical half. Holotype: length 1.45 mm, width 1.45 mm, height 0.90 mm.

Metathoracic wings present. Mesosternum: median carina weak.

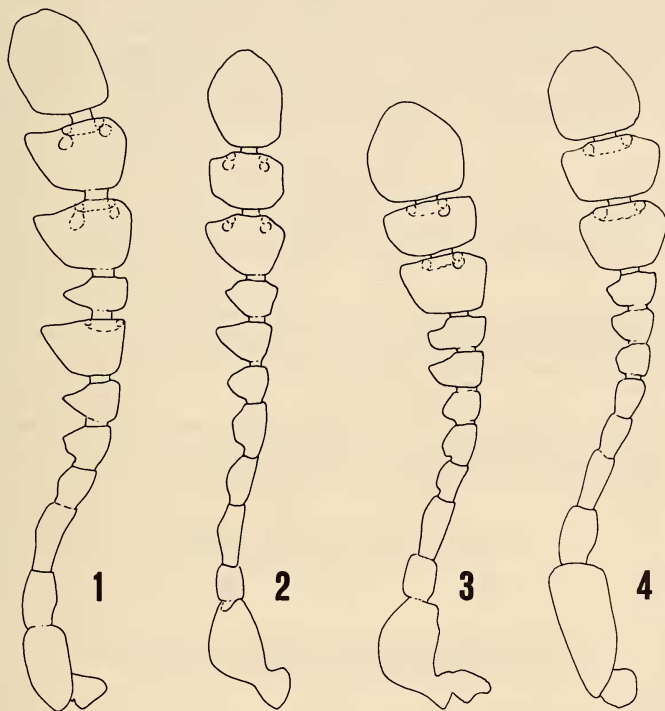
Tarsal formula: ♂ not known, ♀ 4-4-4.

Discussion: *A. loebli* n. sp. is similar to *A. curta* Port. and *A. galloisi* Port. in absence of microsculpture on head and pronotum; it can be distinguished from *A. curta* by the absence of clear series of punctures on elytra, from *A. galloisi* by the sparser punctuation of dorsum.

Derivatio nominis: dedicated to Dr. I. Löbl (Geneva).

Type: NEPAL, Patan district, Bagmati province, Phulcoki, 2500 m, 30.IV.1984, leg. Löbl & Smetana, holotype ♀ N.5530 in GM.

Distribution: Nepal.



FIGS 1-4.

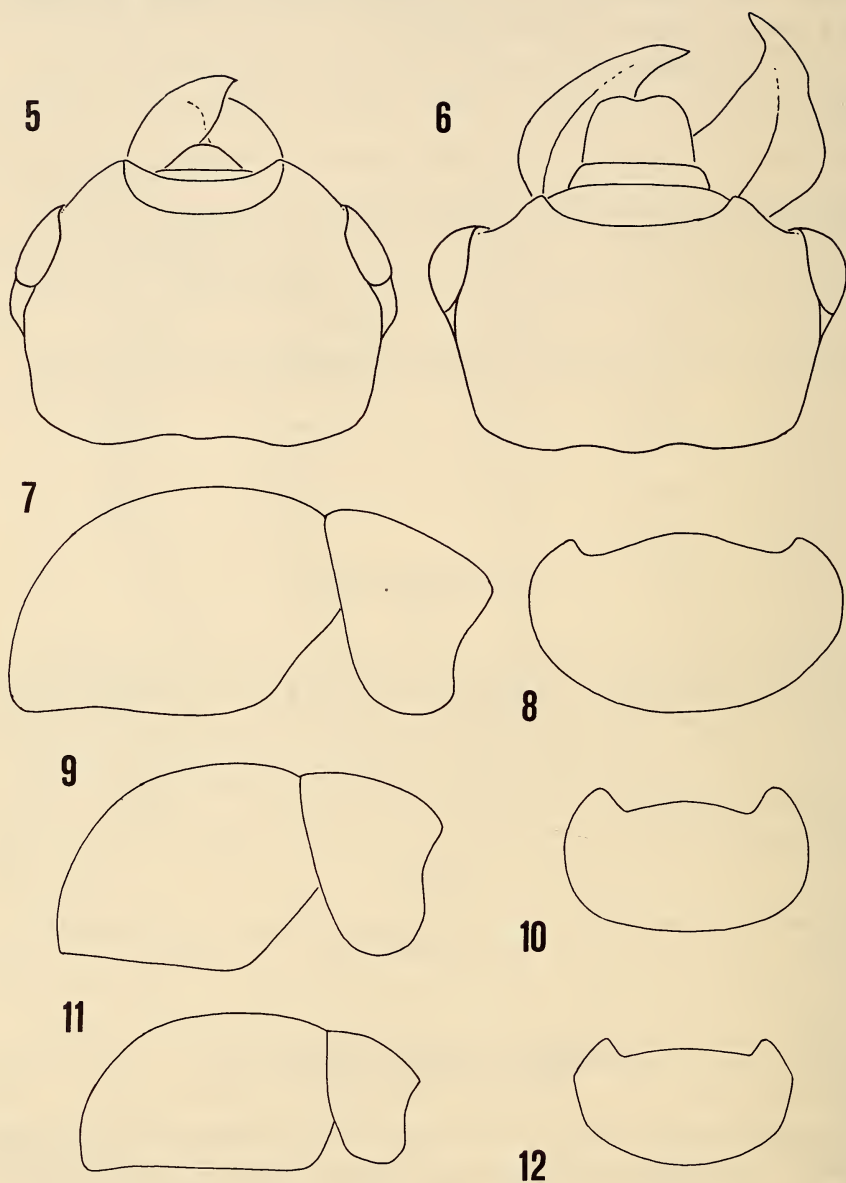
Antenna of: 1, *Anisotoma loebli* n. sp.; 2, *Agathidium glabrum* n. sp.; 3, *A. pseudoconfusum* n. sp.; 4, *A. oculatum* n. sp.

***Agathidium (Cyphocele) glabrum* n. sp.**

Figs 2, 5, 7, 8, 13, 14, 19

Length 3.20-3.30 mm (holotype ♂ 3.30 mm). Dorsum uniformly black; venter black, testaceous at mesosternum; proximal half of antennae testaceous, segments 6-8 darker, club black; tibiae black, tarsi testaceous. Microreticulation nearly absent on dorsum (traces of it on elytra). Punctuation very fine and sparse on the whole dorsum.

Head: Punctures very small and superficial, spaced from each other by 2-8 times their own diameter. Clypeal line very weak, difficult to see. Head shape: fig. 5. 3rd antennal segment 1.8 times as long as the 2nd and shorter than 4th + 5th (fig. 2). Hamann's organ: gutter with 2 vesicles in both 9th and 10th antennal segments.



FIGS 5-12.

Head of: 5, *A. glabrum* n. sp.; 6, *A. oculatum* n. sp.
 Lateral outline of pronotum and elytra and dorsal outline of pronotum in: 7-8, *A. glabrum* n. sp.;
 9-10, *A. pseudoconfusum* n. sp.; 11-12, *A. oculatum* n. sp.

Pronotum: Punctures smaller and more superficial than those of head, spaced from each other by 3-10 times their own diameter. 1.3 times as broad as head, moderately transverse ($W/L = 1.64$) and moderately convex ($W/H = 1.74$). Dorsal outline: fig. 7. Lateral outline: fig. 8. Holotype: length 0.90 mm, width 1.48 mm, height 0.85 mm.

Elytra: With some traces of microreticulation. Punctures as large as those of head, spaced from each other by 5-15 times their own diameter; some larger punctures are interposed. Slightly broader than pronotum, nearly as broad as long and moderately convex ($W/H = 1.52$). Sutural striae sharp, extended within the apical half of elytra. Holotype: length 1.56 mm, width 1.68 mm, height 1.10 mm.

Metathoracic wings present. Meso- and metasternum: median carina weak, lateral lines complete, femoral lines absent.

Legs: Tarsal formula σ 5-5-4, φ 5-4-4.

Male copulatory organ (figs 13-14): Aedeagus comparatively stout, with simple proximal part, lateral margins gently convergent into a broadly rounded apex; ventral piece indistinct. Parameres slender, rounded at apex. Phallobase embracing the aedeagus far from the proximal end of the latter.

Spermatheca (fig. 19): Basal part pear-shaped; apical part short and slender.

Discussion: On the basis of HLISNIKOVSKY's key (1964: 14-16), *A. glabrum* is closely related to *A. subcastaneum* Port., but it lacks both microreticulation and double puncturation on head and pronotum.

Types: NEPAL, Sankhuwasawa distr., Khosi prov., NE Kuwapani, 2400 m, 5.IV.1984, leg. Löbl & Smetana, holotype σ N.5220 and 1 φ paratype N.5221 in GM; Induwa Khola Valley, 2000 m, 14.IV.1984, leg. Löbl & Smetana, 1 σ paratype N.5222 in AC.

Distribution: Nepal.

Collecting methods: Sifting rotten leaves, moss and humus.

***Agathidium (Neoceble) pseudoconfusum* n. sp.**

Figs 3, 9, 10, 15, 16, 20

Length 2.10-2.55 mm (holotype σ 2.20 mm). Dorsum black, dark reddish-brown at sides; venter reddish-brown; antennae with black club; legs reddish-brown. Whole dorsum without microreticulation and with fine and sparse punctuation.

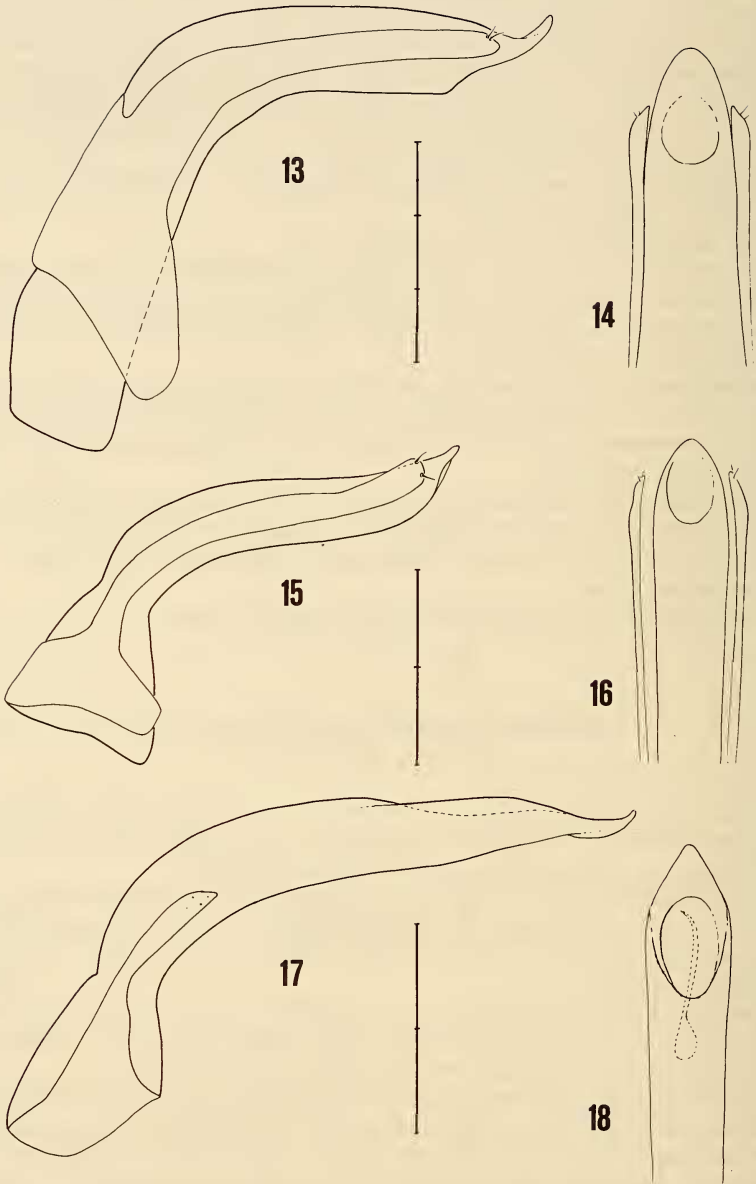
Head: Punctures small and superficial, spaced from each other by 5-10 times their own diameter. Clypeal line very vague. 3rd antennal segment 1.3 times as long as the 2nd and shorter than 4th+5th (fig. 3). Hamann's organ: gutter with one vesicles in both 9th and 10th antennal segments.

Pronotum: Punctuation as on head. 1.5 times as broad as head, very transverse ($W/L = 1.9$) and moderately convex ($W/H = 1.66$). Dorsal outline: fig. 9. Lateral outline: fig. 10. Holotype: length 0.63 mm, width 1.20 mm, height 0.72 mm.

Elytra: Punctures a little larger and more impressed than those of pronotum, spaced from each other by 2-8 times their own diameter. As broad as pronotum, moderately broader than long ($W/L = 1.18$) and very convex ($W/H = 1.45$). Sutural striae sharp, extended within the apical half of elytra. Holotype: length 1.03 mm, width 1.22 mm, height 0.84 mm.

Metathoracic wings present. Meso- and metasternum: median carina sharp, lateral lines complete, femoral lines absent.

Legs: Tarsal formula σ 5-5-4, φ 4-4-4.



FIGS 13-18.

Male copulatory organ (lateral view and ventral view of apex) of: 13-14, *A. glabrum* n. sp.; 15-16, *A. pseudoconfusum* n. sp.; 17-18, *A. oculatum* n. sp. Scale: 1 division = 0.1 mm.

Male copulatory organ (figs 15-16): Aedeagus comparatively stout, with proximal part simple, lateral margins gently convergent into a broadly rounded apex; ventral piece indistinct. Parameres not tapering towards apex. Phallobase embracing the proximal part of the aedeagus.

Spermatheca (fig. 20): Basal part not very enlarged, with a protuberance at the duct connection; apical part short and twisted.

Discussion: *A. pseudoconfusum* n. sp. is similar to *A. confusum* Bris. in many characters, including its very particular shape of head; but it clearly differs from the latter in size, punctuation, tarsal formula of females and aedeagus shape.

Derivatio nominis: Referred to the similarity to *A. confusum* Bris.

Types: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2550 m, 17.X.1983, leg. Löbl & Smetana, holotype ♂ N.5212 in GM; same data, 10.V.1981, 1 ♀ paratype N.5214 in GM, 1 ♂ paratype N.2213 in AC; Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2250 m, 24.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5223 in GM.

Distribution: Nepal.

Collecting methods: Sifting decaying wood and mosses at the foot of a fallen tree.

***Agathidium (Neocele) kumaonicum* Ang. & Dmz.**

Fig. 21

Agathidium (Neocele) kumaonicum Angelini & De Marzo, 1985: 37.

Material: NEPAL, Mustang distr., Dhaulagiri prov., south of Lete, 2500 m, 2.X.1983, leg. Löbl & Smetana, 1 specimen in GM; Manang distr., Gandaki prov., 4 km SE from Pisang, 3050 m, 25.IX.1983, leg. Löbl & Smetana, 1 specimen in AC.

Collecting methods: Sifting decaying wood, rotten leaves and mosses in *Taxus* forest and under bamboo.

Remarks: The new material includes females of this species, of which only 3 ♀ were known. Tarsal formula ♀ 4-4-4. Spermatheca (fig. 21): basal part pear-shaped, apical part short.

Distribution: Nepal, Kumaon and Kashmir. New record for Nepal.

***Agathidium (Neocele) oculatum* n. sp.**

Figs 4, 6, 11, 12, 17, 18, 22

Length 2.15-2.40 mm (holotype ♂ 2.40 mm). Holotype, not fully sclerotized: head dark reddish-brown, pronotum paler, elytra testaceous; paratypes: dorsum uniformly dark reddish-brown; venter reddish-brown, darker at metasternum; antennae with dark club; legs reddish-brown. Microreticulation nearly absent (some traces on elytra). Head and elytra with sparse but distinct punctuation, pronotum with very small punctures.

Head: Punctures small and superficial, spaced from each other by 4-10 times their own diameter. Clypeal line sharp. Eyes hemispherical and protruberant (fig. 6). Anterior margin not excavate. 3rd antennal segment 1.2 times as long as the 2nd and shorter than 4th + 5th (fig. 4). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

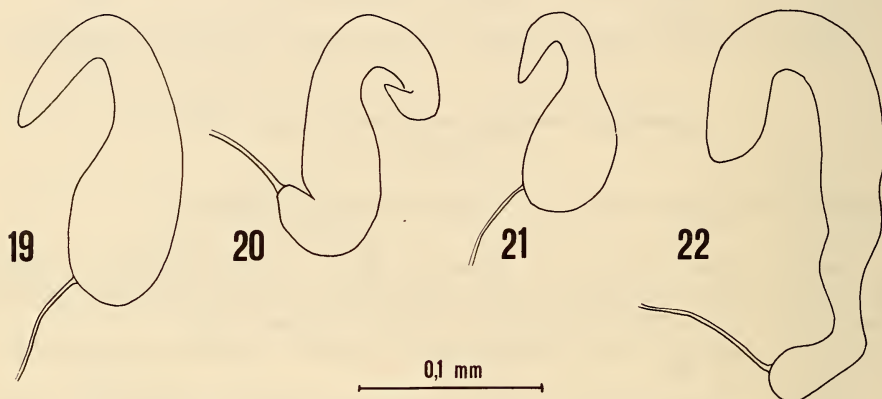
Pronotum: Punctures very small, difficult to see. 1.3 times as broad as head, very transverse (W/L = 2.05) and slightly convex (W/H = 2.05). Dorsal outline: fig. 11. Lateral outline: fig. 12. Holotype: length 0.52 mm, width 1.07 mm, height 0.52 mm.

Elytra: Traces of microreticulation in the holotype. Punctures large and impressed, spaced from each other by 0.5-4 times their own diameter. A little broader than pronotum, as broad as long and moderately convex ($W/H = 1.52$). Sutural striae sharp, extended within the apical third of elytra. Holotype: length 1.15 mm, width 1.16 mm, height 0.76 mm.

Metathoracic wings present. Meso- and metasternum: median carina absent, lateral lines complete, femoral lines absent.

Legs: Tarsal formula ♂ 4-4-4, ♀ 4-4-4.

Male copulatory organ (figs 17-18): Aedeagus slender, with proximal part simple, lateral margins convergent into a subacute apex; ventral piece indistinct; endophallus including a short flagellum. Parameres very short, lacking in apical setae. Phallobase not embracing the aedeagus.



FIGS 19-22.

Spermatheca of: 19, *A. glabrum* n. sp.; 20, *A. pseudoconfusum* n. sp.;
21, *A. kumaonicum* Ang. & Dmz.; 22, *A. oculatum* n. sp.

Spermatheca (fig. 22): Basal part slender and long, increased at the duct connection; apical part short.

Discussion: *A. oculatum* n. sp. is closely related to *A. bonzi* Ang. & Dmz. (1984c) and *A. kumaonicum* Ang. & Dmz. (1985) owing to lack of microreticulation and presence of sutural striae; it differs from *A. bonzi* in size and female tarsal formula, from *A. kumaonicum* in shape of eyes, presence of impressed clypeal line and larger size of the mandibles. The male copulatory organ of *A. oculatum* is very particularly shaped, and reminds that of *Liodypros* (cfr. ANGELINI & DE MARZO 1984c) owing to its short parameres; however, this species cannot be identified as *Liodypros* because it possesses supraocular carina and a not protruberant clypeus.

Types: NEPAL, Parbat distr., Gandaki prov., north Goropani, 2750 m, 5.X.1983, leg. Löbl & Smetana, holotype ♂ N.5209 in GM; Manang distr., Gandaki prov., 4 km SE from Pisang, 3500 m, 25.IX.1983, leg. Löbl & Smetana, 1 ♀ paratype N.2210 in AC; Patan distr., Bagmati prov., Phulchoki, 2650 m, 14.X.1983, leg. Löbl & Smetana, 1 ♀ paratype N.2211 in

GM; same data, 2550 m, 28.IV.1984, 1 ♀ paratype N.5225 in GM, 1 ♂ paratype N.5224 in AC.

Collecting methods: Sifting dead leaves, decaying wood and mosses at the base of rocks or near a fallen oak-tree, in both damp and dry environments.

Distribution: Nepal.

***Agathidium (s. str.) longum* Ang. & Dmz.**

Agathidium (s. str.) longum Angelini & De Marzo, 1985: 39.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., crest at NE of Mangmaya, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 1 specimen in GM; Induwa Khola valley, 2800 m, 15.IV.1984, leg. Löbl & Smetana, 1 specimen in GM, 1 specimen in AC; crest at south of Mangsingma, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC.

Collecting methods: Sifting rotten leaves of rhododendrons and bamboo.

Remarks: This new specimens agree with the description of the types, except in their length (2.3-2.6).

Distribution: Nepal.

***Agathidium (s. str.) sherpa* Ang. & Dmz.**

Agathidium (s. str.) sherpa Angelini & De Marzo, 1981: 272

Agathidium (s. str.) sherpa: ANGELINI & DE MARZO 1985: 41.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600 m, 20.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM, 1 specimen in AC.

Remarks: The new specimens fully agree with the description of the types.

Distribution: Nepal.

***Agathidium (s. str.) sudra* Ang. & Dmz.**

Agathidium (s. str.) sudra Angelini & De Marzo, 1985: 41.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2500 m, 28.III.1982, leg. A. & Z. Smetana, 2 paratypes in GM; same collecting data, 11-12.IV.1982, 9 paratypes in GM, 4 paratypes in AC (data already published in ANGELINI & DE MARZO 1985). Unpublished data: NEPAL, Sankhuwasawa distr., Kosi prov., Induwa Khola valley, 2000-2150 m, 14-18.IV.1984, leg. Löbl & Smetana, 12 specimens in GM, 4 specimens in AC; south of Mangsingma, 2200 m, 11.IV.1984, leg. Löbl & Smetana, 7 specimens in GM, 3 specimens in AC; NE Kuwapani, 2250-2400 m, 5-6.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC; same collecting data, 24.IV.1984, 2 specimens in GM, 1 specimen in AC.

Collecting methods: Sifting rotten leaves, mosses and decaying wood near a fallen tree; sifting plant debris on sandy ground; sifting plant debris and mosses in dry environment.

Remarks: The new specimens slightly differ from the types in colour, prevalently black, and larger size (3.05-3.40 mm); they have been collected at lower altitudes.

Distribution: Nepal.

***Agathidium* (s. str.) *dissimile* n. sp.**

Figs 23, 28, 29, 38, 44, 45, 56

Length 2.80-3.25 mm (holotype ♂ 3.05 mm). Dorsum uniformly dark reddish-brown or black; venter reddish-brown; antennae uniformly testaceous; legs testaceous. Whole dorsum without microreticulation and with very small punctures.

Head: Punctuation sparse, punctures very small and superficial, spaced from each other by 1-10 times their own diameter. Clypeal line absent. 3rd antennal segment 1.7 times as long as the 2nd and longer than 4th+5th (fig. 23). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctate as head. 1.3 times as broad as head, moderately broader than long ($W/L = 1.5$) and very convex ($W/H = 1.47$). Dorsal outline: fig. 28. Lateral outline: fig. 29. Holotype: length 1.00 mm, width 1.50 mm, height 1.02 mm.

Elytra: Punctate as head. Just a little less broad than pronotum, somewhat broader than long ($W/L = 1.13$) and moderately convex ($W/H = 1.61$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.28 mm, width 1.45 mm, height 0.90 mm.

Metathoracic wings absent. Meso- and metasternum: median carina weak, lateral lines absent, femoral lines indistinct (metacoxae close to mesocoxae).

Legs: Male hind femora without tooth (fig. 38). Tarsal formula ♂ 5-5-4, ♀ 5-4-4.

Male copulatory organ (figs 44-45): Aedeagus slender, with proximal part convolute, lateral margins gently convergent into a rounded tip, ventral piece bifid. Parameres comparatively stout.

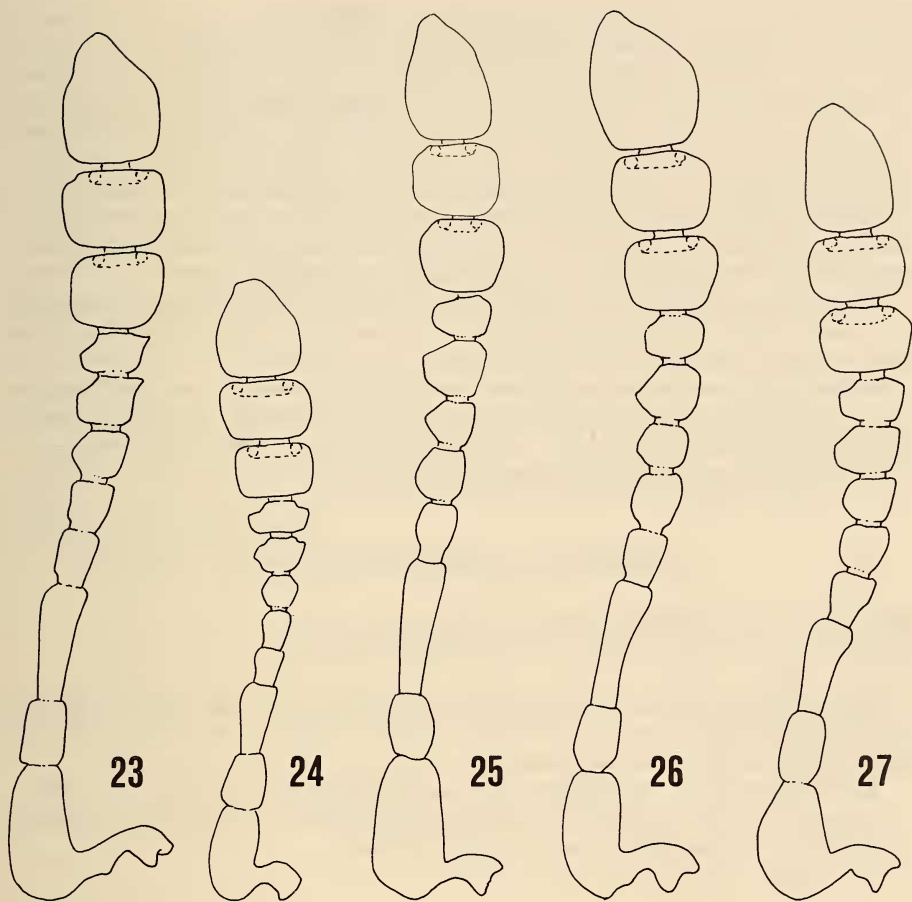
Spermatheca (fig. 56): Basal part pear-shaped; apical part slender and convolute.

Discussion: *A. dissimile* n. sp. is, in external features, practically undistinguishable from *A. sudra* Ang. & Dmz. (1985) but it differs from the latter in shape of aedeagus and spermatheca.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., Sheduwa, 2550 m, 30.III.1982, leg. A. & Z. Smetana, holotype ♂ N.5061 and 4 ♀ paratypes N.5062-5065 in GM, 1 ♂ and 1 ♀ paratypes N.5066-5067 in AC; same data, 2100-2550 m, 9.IV.1982, 3 ♀ paratypes N.5074-5076 in GM; NE Mangmaya, 2300 m, 6.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5226 in GM; NE Kuwapani, 2500 m, 28.III.1982, leg. A. & Z. Smetana, 1 ♀ paratype N.5086 in GM; same data, 11.IV.1982, 1 ♂ and 3 ♀ paratypes N.5077-5080 in GM, 1 ♀ paratype N.5081 in AC; same collecting data, 12.IV.1982, 1 ♂ and 1 ♀ paratypes N.5082-5083 in GM, 1 ♂ and 1 ♀ paratypes N.5084-5085 in AC; same collecting data, 15.IV.1982, 1 ♂ and 3 ♀ paratypes N.5068-5071 in GM, 1 ♂ and 1 ♀ paratypes N.5072-5073 in AC; same locality, 2250-2400 m, 24.IV.1984, leg. Löbl & Smetana, 2 ♀ paratypes N.5228, 5230 in GM, 1 ♂ and 1 ♀ paratypes N.5227, 5229 in AC; same collecting data, 2400 m, 5.IV.1984, 1 ♂ paratype N.5364 in AC; Ahale, 2400 m, 25.III.1982, leg. A. & Z. Smetana, 1 ♀ paratype N.5087 in GM; Chichila, north Ahale, 2200 m, 24.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5231 in GM.

Distribution: Nepal.

Collecting methods: Sifting decaying wood and leaves in dry forest; sifting decaying wood and mosses near a fallen tree; sifting decaying wood covered by fungi.



FIGS 23-27.

Antenna of: 23, *A. dissimile* n. sp.; 24, *A. acuminatum* n. sp.; 25, *A. conspersum* n. sp.;
26, *A. confluens* n. sp.; 27, *A. kuwapanicum* n. sp.

***Agathidium* (s. str.) *brancuccii* Ang. & Dmz.**

Agathidium (s. str.) *brancuccii* Angelini & De Marzo, 1981: 269.

Agathidium (s. str.) *brancuccii*: ANGELINI & DE MARZO 1983b: 153.

Agathidium (s. str.) *brancuccii*: ANGELINI & DE MARZO 1984a: 547.

Agathidium (s. str.) *brancuccii*: ANGELINI & DE MARZO 1985: 42.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600-2700 m, 14-15.X.1983, leg. Löbl & Smetana, 2 specimens in GM; Sankhuwasawa distr., Kosi prov., Bakan, west Tashigaon, 3200 m, 5.IV.1982, leg. A. & Z. Smetana, 1 specimen in GM; Sheduwa, 3000 m,

31.III-1.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM; crest at NE of Mangmaya, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 5 specimens in GM, 2 specimens in AC; Induwa-Khola valley, 2100 m, 18.IV.1984, leg. Löbl & Smetana, 1 specimen in GM; crest at south of Mangsingma, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC; same data, 2200 m, 11.IV.1984, 30 specimens in GM, 8 specimens in AC; NE Kuwapani, 2500 m, 28.III.1982, leg. A. & Z. Smetana, 5 specimens in GM, 2 specimens in AC; same locality, 11-12.IV.1982, 10 specimens in GM, 4 specimens in AC; same locality, 2250-2400 m, 5-6.IV.1984, leg. Löbl & Smetana, 6 specimens in GM, 2 specimens in AC; same data, 2250-2400 m, 24.IV.1984, 19 specimens in GM, 4 specimens in AC; Ahale, 2300-2400 m, 25-26.III.1982, leg. A. & Z. Smetana, 8 specimens in GM.

Collecting methods: Sifting rotten leaves of bamboo and rhododendron, mosses and rotten wood in forest; sifting plant debris along a river bank; sifting fungi on dead oak trunks, decaying leaves and wood near the latter, in dry forest.

Remarks: *A. brancuccii* is very common in Nepal and occurs in a very large range of altitude. We have so far examined 457 specimens from 46 localities, from 460 to 3300 m. The characters of the new specimens are fully in agreement with those of the types.

Distribution: Nepal, India (Darjeeling and Sikkim).

***Agathidium* (s. str.) *caelebs* Ang. & Dmz.**

Agathidium (s. str.) *caelebs* Angelini & De Marzo, 1981: 268.

Agathidium (s. str.) *caelebs*: ANGELINI & DE MARZO 1985: 42.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600 m, 20-22.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM, 1 specimen in AC; same locality, 2550 m, 29.IV.1984, leg. Löbl & Smetana, 1 specimen in GM.

Collecting methods: Sifting rotten wood and mosses near a fallen tree.

Remarks: The new specimens do not differ from the types in colour, size and punctuation characters and have been found at similar altitudes.

Distribution: Nepal.

***Agathidium* (s. str.) *newari* Ang. & Dmz.**

Agathidium (s. str.) *newari* Angelini & De Marzo, 1985: 42.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2600 m, 15.IV.1982, leg. A. & Z. Smetana, 1♂ paratype in GM (data already published in ANGELINI & DE MARZO 1985). Unpublished data: NEPAL, Sankhuwasawa distr., Kosi prov., Induwa Khola valley, 2000-2100 m, 16-17.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC; NE Kuwapani, 2400 m, 24.IV.1984, leg. Löbl & Smetana, 1 specimen in AC.

Collecting methods: Sifting dead leaves and tree branches on both marshy and dry grounds.

Remarks: The new specimens have been collected at lower altitudes. Their length range is 2.75-3.05 mm. The aedeagus apex (dorsal view) is slightly different from that of the types.

Distribution: Nepal.

Agathidium (s. str.) alatum Ang. & Dmz.

Fig. 57

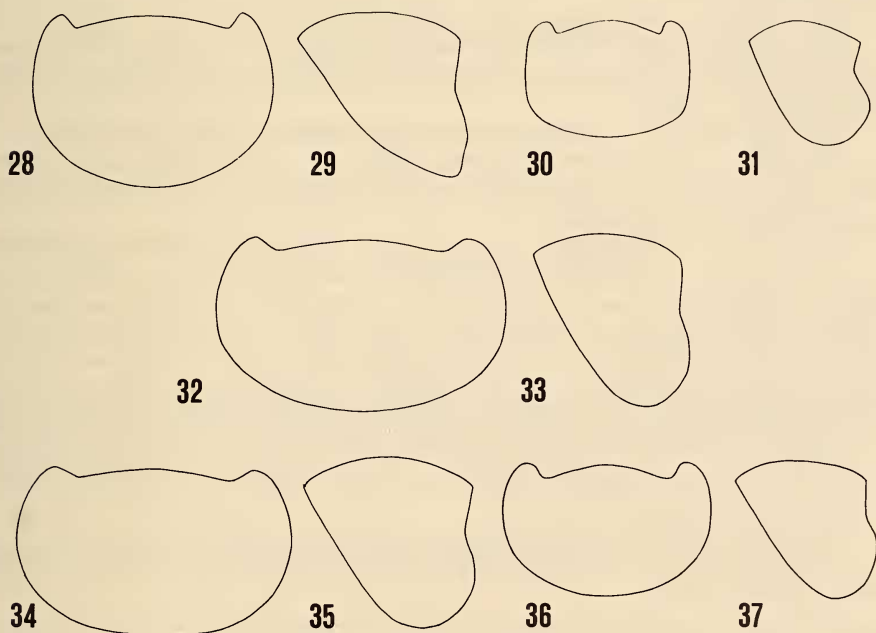
Agathidium (s. str.) *alatum* Angelini & De Marzo, 1981: 209.*Agathidium* (s. str.) *alatum*: ANGELINI & COOTER 1985: 37.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Goropani, 2700 m, 6.X.1983, leg. Löbl & Smetana, 1 specimen in GM, 2 specimens in AC; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 1 specimen in GM; Manang distr., Gandaki prov., west of Bagarchap, 2200 m, 24.IX.1983, leg. Löbl & Smetana, 2 specimens in GM; Patan distr., Bagmati prov., Phulcoki, 2600-2700 m, 14-15.X.1983, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC.

Collecting methods: Sifting decaying wood and leaves, mosses and fungi on trunks of rhododendrons and oaks; sifting forest litter at the foot of a very old fir-tree in marshy ground; sifting decaying wood and leaves near an old fallen tree in dry forest.

Remarks: The new material includes females of this species, of which only 3 males were known. Spermatheca (fig. 57): basal part pear-shaped, apical part short. Tarsal formula ♀: 5-4-4. Length range: 3.00-3.40 mm. These specimens have been collected at lower altitudes (types: 3000-3500 m).

Distribution: Nepal, India (Uttar Pradesh).



FIGS 28-37.

Dorsal and lateral outline of pronotum in: 28-29, *A. dissimile* n. sp.; 30-31, *A. acuminatum* n. sp.; 32-33, *A. conspersum* n. sp.; 34-35, *A. confluens* n. sp.; 36-37, *A. kuwapanicum* n. sp.

***Agathidium (s. str.) acuminatum* n. sp.**

Figs 24, 30, 31, 39, 46, 47, 58

Length 1.80-2.45 mm (holotype ♂ 1.80 mm). Dorsum uniformly reddish-brown; venter reddish-brown, paler at mesosternum; antennae uniformly testaceous; legs testaceous. Whole dorsum lacking in microreticulation, finely and sparsely punctate.

Head: Punctures small and superficial, spaced from each other by 3-5 times their own diameter. Antero-lateral margins rimmed. Clypeal line absent. 3rd antennal segment 1.4 times as long as the 2nd and shorter than 4th+5th (fig. 24). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures as small as those of head, spaced from each other by 1-5 times their own diameter. 1.4 times as broad as head, moderately transverse ($W/L = 1.48$) and very convex ($W/H = 1.44$). Dorsal outline: fig. 30. Lateral outline: fig. 31. Holotype: length 0.70 mm, width 1.04 mm, height 0.72 mm.

Elytra: Punctures smaller and more superficial than those of head, spaced from each other by 4-10 times their own diameter. As broad as pronotum, somewhat broader than long ($W/L = 1.16$) and moderately convex ($W/H = 1.77$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 0.90 mm, width 1.05 mm, height 0.59 mm.

Metathoracic wings present but vestigial, 1/3 as long as the elytra. Meso- and metasternum: median carina present, lateral lines absent; femoral lines incomplete and particularly short.

Legs: Male hind femora enlarged (fig. 39). Tarsal formula ♂ 5-5-4, ♀ 5-4-4.

Male copulatory organ (figs 46-47): Aedeagus slender, with hook-like proximal part, lateral margins gently convergent into a rounded tip, bifid ventral piece. Parameres slender, slightly enlarged at apex.

Spermatheca (fig. 58): Basal part pear-shaped, apical part short and slender.

Discussion: *A. acuminatum* is somewhat similar to *A. darjeelingense* Ang. & Dmz. (1981) and *A. alatum* Ang. & Dmz. (1981) in its external features, but the shape of its male copulatory organ is very different.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2500 m, 14.IV.1982, leg. A. & Z. Smetana, holotype ♂ N.5090 in GM; same data, 2600 m, 15.IV.1982, 1♂ paratype N.5089 in AC; same locality, 2250 m, 6.IV.1984, leg. Löbl & Smetana, 1♀ paratype N.5232 in GM; same data, 2250 m, 24.IV.1984, 1♂ paratype N.5249 in GM; Induwa Khola valley, 2000 m, 14.IV.1984, leg. Löbl & Smetana, 1♀ paratype N.5233 in GM; same data, 16.IV.1984, 4♂ and 1♀ paratypes N.5234-5238 in GM, 2♂ and 1♀ paratypes N.5239-5241 in AC; same data, 2100 m, 17.IV.1984, 1♀ paratype N.5242 in GM, 2♀ paratypes N.5243-5244 in AC; same data, 2000-2150 m, 1♂ and 2♀ paratypes N.5245-5247 in GM, 1♂ paratype N.5248 in AC; Ahale, 2400 m, 25.III.1982, leg. A. & Z. Smetana, 1♂ paratype N.5088 in GM.

Distribution: Nepal.

Collecting methods: Sifting dead leaves, rotten wood and mosses in forest, or plant debris on sandy ground.

***Agathidium (s. str.) khasicum* Ang. & Dmz.**

Agathidium (s. str.) khasicum Angelini & De Marzo, 1984a: 555.

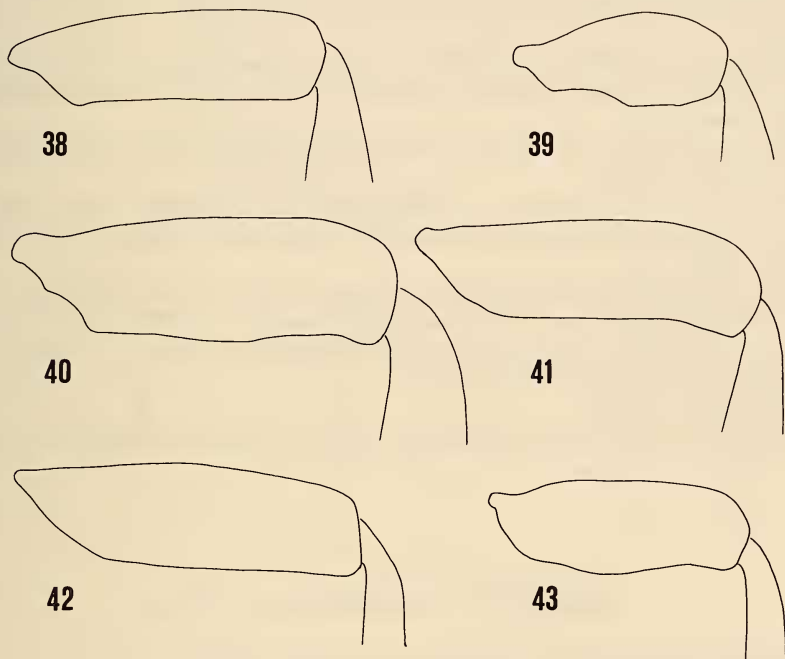
Agathidium (s. str.) khasicum: ANGELINI & DE MARZO 1986a: 431.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., Chichila, above Ahale, 2200 m, 4.IV.1984, leg. Löbl & Smetana, 1 specimen in GM.

Collecting methods: Sifting decaying wood, dead leaves and mosses.

Remarks: This Nepalese specimen is identical to the types in its external characters. Its aedeagus apex is slightly excavate.

Distribution: Nepal, India (Darjeeling and Meghalaya). New record for Nepal.



FIGS 38-43.

Male hind femur of: 38, *A. dissimile* n. sp.; 39, *A. acuminatum* n. sp.; 40, *A. conspersum* n. sp.; 41, *A. substriatum* Ang. & Dmz.; 42, *A. confluens* n. sp.; 43, *A. kuwapanicum* n. sp.

***Agathidium (s. str.) conspersum* n. sp.**

Figs 25, 32, 33, 40, 48, 49, 59

Length 3.15-3.50 mm (holotype ♂ 3.50 mm). Dorsum uniformly black; venter reddish-brown; antennae uniformly testaceous; legs reddish-brown. Whole dorsum uniformly microreticulate; some punctures only on head.

Head: Microreticulation distinct and regular. Only some superficial punctures. Clypeal line absent. 3rd antennal segment twice as long as the 2nd and as long as 4th + 5th (fig. 25). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Microreticulation distinct and regular. 1.4 times as broad as head, moderately transverse ($W/L = 1.76$) and moderately convex ($W/H = 1.71$). Dorsal outline: fig. 32. Lateral outline: fig. 33. Holotype: length 1.02 mm, width 1.80 mm, height 1.05 mm.

Elytra: Microreticulation denser than that of pronotum. As broad as pronotum, nearly as broad as long and slightly convex ($W/H = 2$). Lateral outline with weak humeral angle. Sutural striae distinct, extended within the apical half of elytra. Holotype: length 1.65 mm, width 1.80 mm, height 0.90 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines complete.

Legs: Male hind femora with a weak distal tooth (fig. 40). Tarsal formula σ 5-5-4, φ 4-4-4.

Male copulatory organ (figs 48-49): Aedeagus slender, with ring-like proximal part, lateral margins gently convergent into a subacute apex, bifid ventral piece. Parameres gently tapering towards apex.

Spermatheca (fig. 59): Basal and apical parts slender, nearly alike in length; the former larger in caliber.

Discussion: *A. conspersum* n. sp. is very similar to *A. subopacum* Ang. & Dmz. (1981, 1983a) in its external features and spermatheca shape, but it differs from the latter in aedeagus shape.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., crest at NE of Mangmaya, NW versant, 2800 m, 7.IV.1984, leg. Löbl & Smetana, holotype σ N.5250 in GM, 1 σ and 1 φ paratypes N.5251-5252 in AC; crest at south of Mangsingma, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 1 σ paratype N.5253 in GM.

Distribution: Nepal.

Collecting methods: Sifting dead leaves of bamboo and rhododendron near a spring.

***Agathidium* (s. str.) *subopacum* Ang. & Dmz.**

Agathidium (s. str.) *subopacum* Angelini & De Marzo, 1981: 227.

Agathidium (s. str.) *subopacum*: ANGELINI & DE MARZO 1983a: 161.

Agathidium (s. str.) *subopacum*: ANGELINI & DE MARZO 1983b: 156.

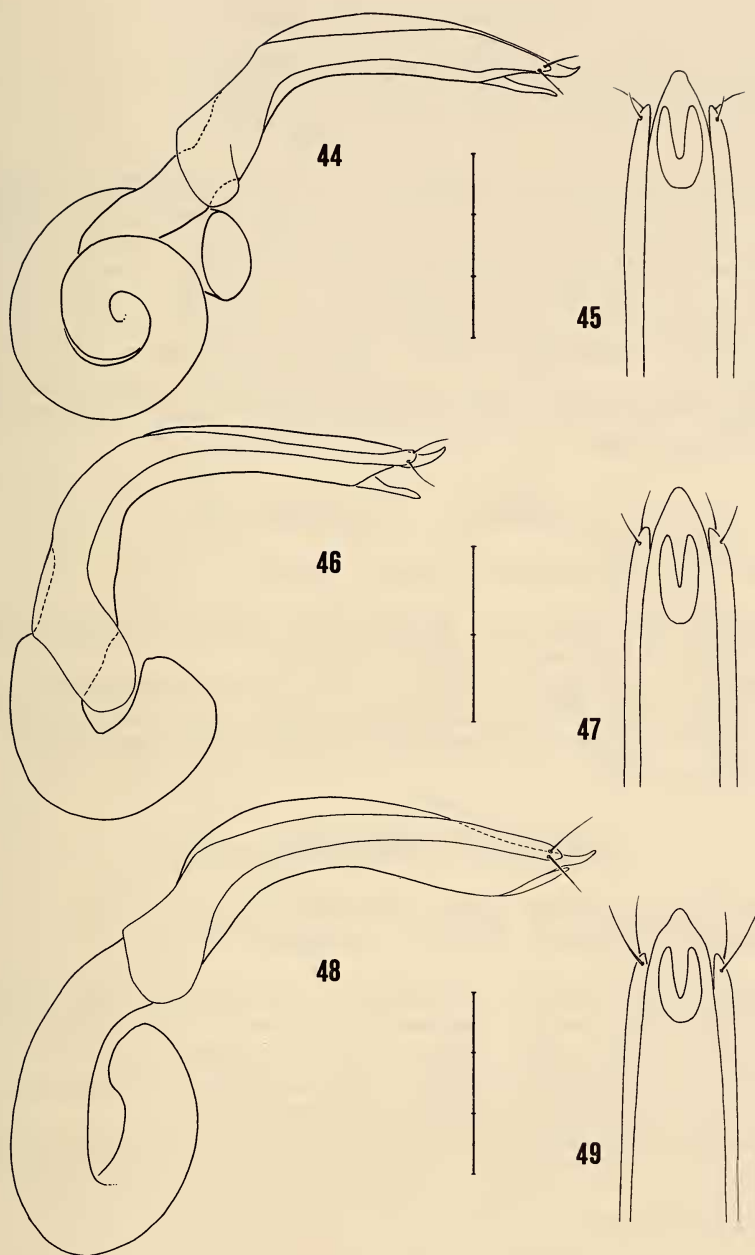
Agathidium (s. str.) *subopacum*: ANGELINI & DE MARZO 1985: 44.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2550-2600 m, 20-22.IV.1982, leg. A. & Z. Smetana, 65 specimens in GM, 17 specimens in AC; same locality, 2550-2700 m, 13-17.X.1983, leg. Löbl & Smetana, 14 specimens in GM, 3 specimens in AC; same data, 2500-2550 m, 28-30.IV.1984, 54 specimens in GM, 16 specimens in AC; Sankuwasawa distr., Kosi prov., Bakan, west of Tashigaon, 3200 m, 5.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM.

Collecting methods: Sifting dead leaves, decaying wood and mosses in forest of oak-trees and bamboo; sifting litter at the base of rocks; sifting fungi on dead oaks; the species has been found in both very damp and dry environment.

Remarks: The new specimens do not differ in colour and microreticulation characters from those we have examined so far. Length range: 2.90-3.55 mm.

Distribution: Nepal, India (Uttar Pradesh and Darjeeling), Bhutan.



FIGS 44-49.

Male copulatory organ (lateral view and ventra view of apex) of: 44-45, *A. dissimile* n. sp.; 46-47, *A. acuminatum* n. sp.; 48-49, *A. conspersum* n. sp. Scale: 1 division = 0.1 mm.

***Agathidium (s. str.) francae* Ang. & Dmz.**

Agathidium (s. str.) francae Angelini & De Marzo, 1981: 224.

Agathidium (s. str.) francae: ANGELINI & DE MARZO 1983a: 159.

Agathidium (s. str.) francae: ANGELINI & DE MARZO 1985: 45.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2550-2600 m, 20-22.IV.1982, leg. A. & Z. Smetana, 48 specimens in GM, 10 specimens in AC; same locality, 2550-2700 m, 13-17.X.1983, leg. Löbl & Smetana, 19 specimens in GM, 4 specimens in AC; same data, 2500-2700 m, 28-30.IV.1984, 154 specimens in GM, 40 specimens in AC; Sankhuwasawa distr., Kosi prov., Sheduwa, 3000 m, 1.IV.1982, leg. A. & Z. Smetana, 1 specimen in GM.

Collecting methods: Sifting dead leaves, decaying wood and mosses in forest of oak-trees and bamboo; sifting fungi on a dead oak trunk; sifting litter in dry environment.

Remarks: The new specimens show the same variability in colour, microreticulation and puncturation than those we have previously examined. Length range: 2.90-3.55 mm.

Distribution: Nepal.

***Agathidium (s. str.) kali* Ang. & Dmz.**

Agathidium (s. str.) kali Angelini & De Marzo, 1985: 48.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Goropani, northern side, 2750 m, 5.X.1983, leg. Löbl & Smetana, 1 specimen in GM.

Collecting methods: Sifting decaying wood and leaves near a fallen oak trunk.

Remarks: The characters of this specimen are fully in agreement with those of the types. It has been collected at comparatively low altitude (types: 3300-4500 m).

Distribution: Nepal.

***Agathidium (s. str.) castaneum* Ang. & Dmz.**

Agathidium (s. str.) castaneum Angelini & De Marzo, 1981: 218.

Agathidium (s. str.) castaneum: ANGELINI & DE MARZO 1983c: 8.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 1 specimen in GM; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 1 specimen in GM, 2 specimens in AC.

Collecting methods: Sifting mosses and rotten leaves in forest of rhododendrons and fir-trees, or at the foot of a very large fir-tree in marshy ground.

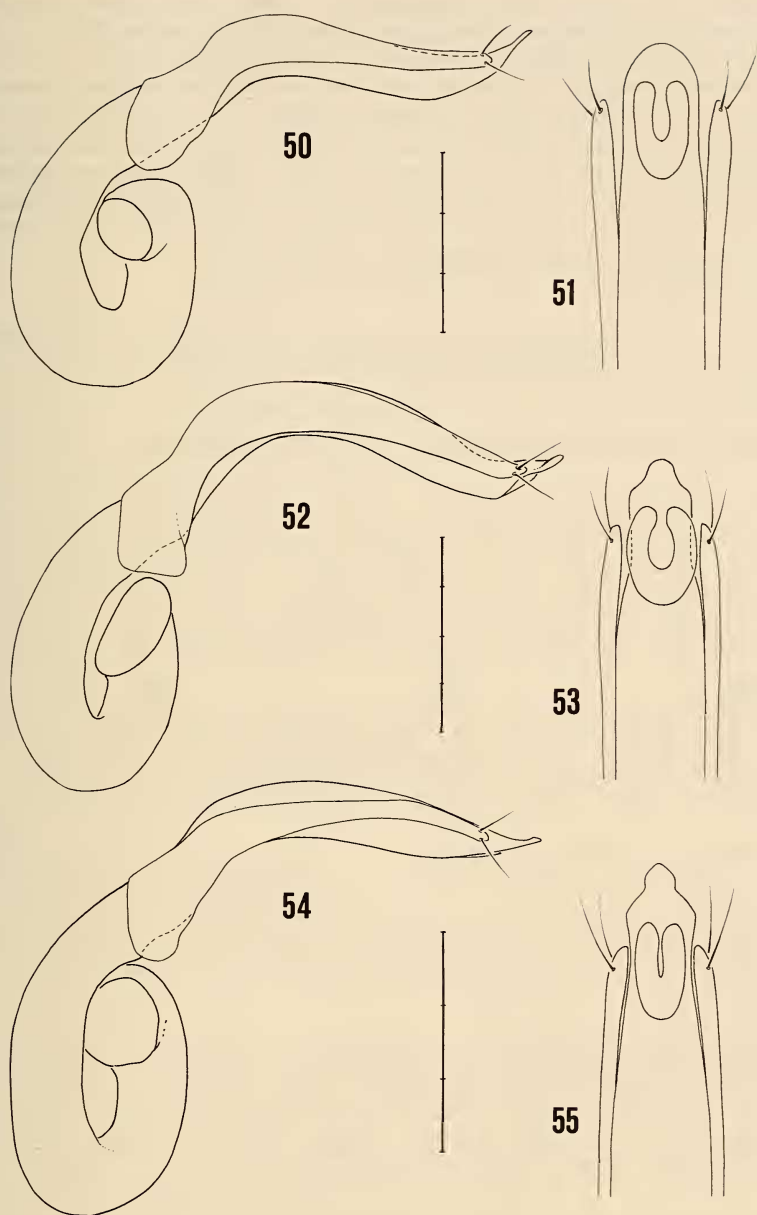
Remarks: In these new specimens, the microreticulation of the head is less impressed than that of the types; the colour is somewhat darker, nearly black. Length range: 2.30-2.45 mm.

Distribution: Nepal.

***Agathidium (s. str.) substriatum* Ang. & Dmz.**

Figs 41, 50, 51

Agathidium (s. str.) substriatum Angelini & De Marzo, 1981: 230.



FIGS 50-55.

Male copulatory organ (lateral view and ventral view of apex) of: 50-51, *A. substriatum* Ang. & Dmz.;
 52-53, *A. confluens* n. sp.; 54-55, *A. kuwapanicum* n. sp.
 Scale: 1 division = 0.1 mm.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 2 specimens in GM; south Goropani, 2700 m, 9.X.1983, leg. Löbl & Smetana, 5 specimens in GM, 4 specimens in AC.

Collecting methods: Sifting mosses and dead leaves in forest of rhododendrons and fir-trees, or in a ravin with rhododendrons and maples.

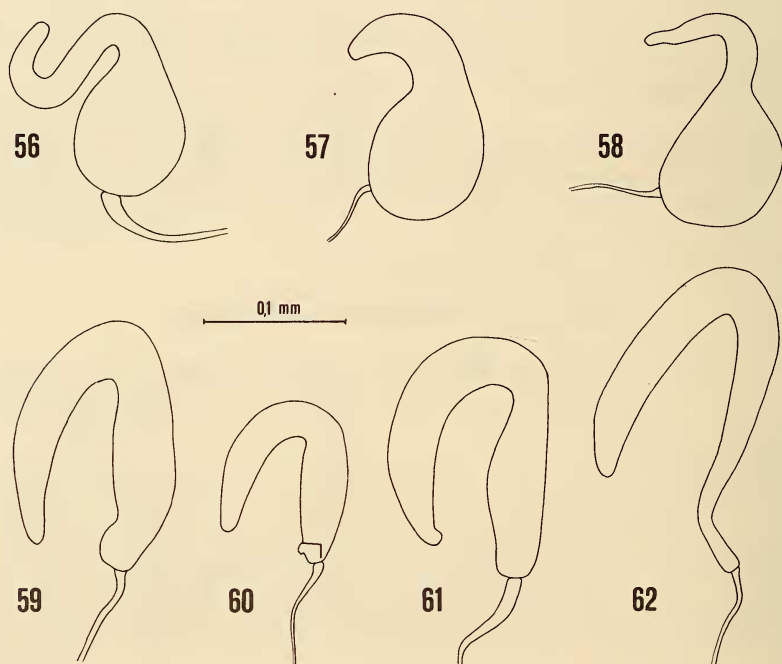
Remarks: We knew so far only the holotype ♀ of this species. The new specimens are uniformly black-coloured; in some of them the head is distinctly microreticulate on the disc, as well as near the eyes. In most cases the elytral microreticulation is more impressed in the females. Length range: 2.60-2.85 mm. Male hind femora: fig. 41. Tarsal formula ♂ 5-5-4. Male copulatory organ: figs 50-51.

Distribution: Nepal.

***Agathidium* (s. str.) *johnsoni* Ang. & Dmz.**

Agathidium (s. str.) *johnsoni* Angelini & De Marzo, 1981: 231.

Agathidium (s. str.) *johnsoni*: ANGELINI & DE MARZO 1983a: 164.



FIGS 56-62.

Spermatheca of: 56, *A. dissimile* n. sp.; 57, *A. alatum* Ang. & Dmz.; 58, *A. acuminatum* n. sp.; 59, *A. conspersum* n. sp.; 60, *A. confluens* n. sp.; 61, *A. concolor* Ang. & Dmz.; 62, *A. kuwapanicum* n. sp.

Material: NEPAL, Mustang distr., Dhaulagiri prov., 2 km north of Kalo Pani, 2550 m, 1.X.1983, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC; south Lete, 2500 m, 2.X.1983, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC.

Collecting methods: Sifting litter, particularly at base of bamboos, in forest of *Taxus*; sifting mosses and rotten leaves at the forest edge.

Remarks: The characters of these new specimens are in full agreement with those of the types.

Distribution: Nepal.

***Agathidium (s. str.) confluens* n. sp.**

Figs 26, 34, 35, 42, 52, 53, 60

Length 3.15-3.30 mm (holotype ♂ 3.30 mm). Dorsum uniformly black; venter reddish-brown; antennae uniformly testaceous; legs reddish-brown. Microreticulated only at sides of head and on elytra, more weakly in the males. Punctuation present only on head and pronotum.

Head: Microreticulation present only near eyes, more impressed in the females. Punctures small and superficial, spaced from each other by 4-10 times their own diameter. Clypeal line absent. 3rd antennal segment twice as long as the 2nd and as long as 4th + 5th (fig. 26). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Microreticulation absent. Punctures a little larger and more impressed than those of head, spaced from each other by 1-4 times their own diameter. 1.3 times as broad as head, moderately transverse ($W/L = 1.64$) and moderately convex ($W/H = 1.6$). Dorsal outline: fig. 34; lateral outline: fig. 35. Holotype: length 1.05 mm, width 1.73 mm, height 1.08 mm.

Elytra: Microreticulation weak in males, somewhat impressed in females. Punctuation absent. Rather less broad than pronotum, as broad as long and moderately convex ($W/H = 1.71$). Lateral outline with weak humeral angle. Sutural striae impressed, extended within the apical third of elytra. Holotype: length 1.55 mm, width 1.65 mm, height 0.96 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines complete.

Legs: Male hind femora without tooth (fig. 42). Tarsal formula: ♂ 5-5-4, ♀ 4-4-4.

Male copulatory organ (figs 52-53): Aedeagus slender, with ring-like proximal part, lateral margins sinuate, broadly rounded apex, bifid ventral piece. Parameres slender, gently tapering towards apex.

Spermatheca (fig. 60): Basal and apical parts slender, alike in length and caliber.

Discussion: *A. confluens* n. sp. is very similar to *A. parbaticum* Ang. & Dmz. (1983a) and *A. johnsoni* Ang. & Dmz. (1981) in habitus and further external characters; from *A. parbaticum* it differs in the dorsal colour, punctuation (more impressed) and length ratio 3rd/2nd of antennae; from *A. johnsoni* it differs in shape of male hind femora and head punctuation (sparser). Its male copulatory organ is very similar to that of the latter species, but it is less sinuate at apex.

Types: NEPAL, Parbat distr., Gandaki prov., north Goropani, 2750 m, 5.X.1983, leg. Löbl & Smetana, holotype ♂ N.5192 and 2 ♀ paratypes N.5193-5194 in GM, 1 ♂ and 1 ♀ paratypes N.5195-5196 in AC; same data, 2700 m, 6.X.1983, 2 ♀ paratypes N.5197-5198 in GM, 1 ♀ paratype N.5199 in AC; south Goropani, 2700 m, 9.X.1983, leg. Löbl & Smetana, 1 ♂ and 1 ♀ paratypes N.5200-5201 in GM; Sankhuwasawa distr., Kosi prov., south Mangsingma, 2200 m, 11.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5254 in GM.

Distribution: Nepal.

Collecting methods: Sifting dead leaves, decaying wood and mosses; sifting forest litter and fungi on rhododendron trunks.

***Agathidium (s. str.) parbaticum* Ang. & Dmz.**

Agathidium (s. str.) parbaticum Angelini & De Marzo, 1983a: 164.

Material: NEPAL, Mustang distr., Dhaulagiri prov., 2 km north from Kalo Pani, 2550 m, 1.X.1983, leg. Löbl & Smetana, 1 specimen in GM; Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 6 specimens in GM, 3 specimens in AC; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 6 specimens in GM, 3 specimens in AC; south Goropani, 2700 m, 9.X.1983, leg. Löbl & Smetana, 2 specimens in GM.

Collecting methods: Sifting litter, particularly at base of bamboos, in forest of *Taxus*; sifting litter at the foot of a very large fir-tree in marshy ground; sifting mosses and rotten leaves in forest of rhododendrons and fir-trees or in a ravine with rhododendrons and maples.

Remarks: Some specimens show traces of microreticulation also on the disc of head and pronotum; in some females the elytral microreticulation is clearly more impressed than that of the males. Length range: 2.55-2.80 mm.

Distribution: Nepal.

***Agathidium (s. str.) apterum* Ang. & Dmz.**

Agathidium (s. str.) apterum Angelini & De Marzo, 1981: 232.

Agathidium (s. str.) apterum: ANGELINI & DE MARZO 1985: 49.

Material: NEPAL, Sindhupalchok distr., Bagmati prov., NE Barahbise, Amatal Khola, 3100 m, Tingsang, 27.X.1981, leg. Cassagnau, 1 specimen in GM; Patan distr., Bagmati prov., Phulchoki, 2550 m, 21.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM, 1 specimen in AC; same locality, 2500 m, 28-30.IV.1984, leg. Löbl & Smetana, 7 specimens in GM, 2 specimens in AC.

Collecting methods: Sifting decaying wood with fungi and leaves at the base of rocks and near a fallen oak-tree.

Remarks: We have noted the variability of microreticulation and punctuation of this species in a previous paper (1985). Also the length range is considerable: 2.80-3.70 mm.

Distribution: Nepal, India (Darjeeling).

***Agathidium (s. str.) concolor* Ang. & Dmz.**

Fig. 61

Agathidium (s. str.) concolor Angelini & De Marzo, 1981: 246.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., Bakan, west Tashigaon, 3200 m, 5.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM, 1 specimen in AC; Sheduwa, 3000 m, 31.III.-1.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM, 2 specimens in AC; 2 km east

of Mangsingma, 1900 m, 19.IV.1984, leg. Löbl & Smetana, 8 specimens in GM, 3 specimens in AC; Induwa Khola valley, 2000-2150 m, 14-18.IV.1984, leg. Löbl & Smetana, 5 specimens in GM, 3 specimens in AC; NE Kuwapani, 2500 m, 28.III.1982, leg. A. & Z. Smetana, 2 specimens in GM; same data, 2600 m, 15.IV.1982, 1 specimen in GM; same locality, 2350-2400 m, 5.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 2 specimens in AC; same data, 2400 m, 24.IV.1984, 2 specimens in GM.

Collecting methods: Sifting decaying wood and leaves, mosses near a spring, plant debris on the bank of a river; the species has been found in both damp and dry environments.

Remarks: We knew only the holotype ♂ of this species. Dorsum uniformly black, antennae uniformly coloured; elytral microreticulation very weak or absent in males, impressed in the females. Tarsal formula ♀ 4-4-4. Spermatheca (fig. 61): basal and apical parts similar in length and caliber. Length range: 2.80-3.05 mm.

Distribution: Nepal.

***Agathidium (s. str.) brunneum* Ang. & Dmz.**

Agathidium (s. str.) brunneum Angelini & De Marzo, 1981: 233.

Agathidium (s. str.) brunneum: ANGELINI & DE MARZO 1983a: 166.

Agathidium (s. str.) brunneum: ANGELINI & COOTER 1986: 37.

Material: NEPAL, Mustang distr., Dhaulagiri prov., 2 km north of Kalo Pani, 2550 m, 1.X.1983, leg. Löbl & Smetana, 1 specimen in GM; Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 5 specimens in GM, 4 specimens in AC; Goropani, 2750 m, 5.X.1983, leg. Löbl & Smetana, 2 specimens in GM; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 2 specimens in GM.

Collecting methods: Sifting decaying wood, leaves and mosses, particularly at base of bamboos, in forest of *Taxus*, or near the trunk of a fallen oak-tree, or at the base of a large fir-tree in marshy ground, or in forest of rhododendrons and fir-trees.

Remarks: The characters of the new specimens are fully in agreement with those of the types. Length range: 2.40-2.80 mm.

Distribution: Kashmir, Nepal.

***Agathidium (s. str.) kuwapanicum* n. sp.**

Figs 27, 36, 37, 43, 54, 55, 62

Length 2.50-2.90 mm (holotype ♂ 2.50 mm). Dorsum reddish-brown, darker at elytra in some specimens; venter reddish-brown; antennae uniformly testaceous; legs reddish-brown. Microreticulation present only on elytra, and more impressed in the females. Punctuation dense on head and pronotum, fine and sparse on elytra.

Head: Punctures small and superficial, spaced from each other by 1-2 times their own diameter. Clypeal line absent. 3rd antennal segment 1.3 times as long as the 2nd and shorter than 4th+5th (fig. 27). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures as those of head, except some larger ones. 1.3 times as broad as head, moderately transverse (W/L = 1.6) and moderately convex (W/H = 1.52). Dorsal outline: fig. 36. Lateral outline: fig. 37. Holotype: length 0.80 mm, width 1.28 mm, height 0.84 mm.

Elytra: Microreticulation nearly absent in the males, distinct and impressed in the females. Punctures small, superficial and very sparse. A little less broad than pronotum, a little broader than long ($W/L = 1.18$) and very convex ($W/H = 1.44$). Lateral outline with weak humeral angle. Sutural striae slight and extended within the apical third of elytra. Holotype: length 1.10 mm, width 1.30 mm, height 0.90 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines complete.

Legs: Male hind femora without tooth (fig. 43). Tarsal formula σ 5-5-4, φ 4-4-4.

Male copulatory organ (figs 54-55): Aedeagus slender, with ring-like proximal part, lateral margins sinuate and convergent into a small rounded tip, ventral piece bifid. Parameres slender, gently tapering towards apex.

Spermatheca (fig. 62): Basal and apical parts slender and very different in length; the former thinner and longer.

Discussion: *A. kuwapanicum* n. sp. is very similar to *A. brunneum* Ang. & Dmz. (1981) and *A. indistinctum* Ang. & Dmz. (1981) in its external features, and the identification of it must be based on the examination of its male copulatory organ. The latter is very similar to that of *A. barahbisense* Ang. & Dmz. (1985), but its spermatheca is very different.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2500 m, 11.IV.1982, leg. A. & Z. Smetana, holotype σ N.5095, 7 σ and 5 φ paratypes N.5096-5107 in GM, 2 σ and 2 φ paratypes N.5108-5111 in AC; same data, 28.III.1982, 3 σ and 4 φ paratypes N.5112-5118 in GM, 2 σ and 1 φ paratypes N.5119-5121 in AC; same data, 12.IV.1982, 3 σ and 3 φ paratypes N.5121-5127 in GM, 2 σ and 1 φ paratypes N.5128-5130 in AC; same locality, 2350-2400 m, 5.IV.1984, leg. Löbl & Smetana, 10 σ and 4 φ paratypes N.5365-5378 in GM, 2 σ and 1 φ paratypes N.5379-5381 in AC; same data, 2250 m, 6.IV.1984, 1 σ paratype N.5382 in GM; same data, 2250-2400 m, 24.IV.1984, 14 σ and 13 φ paratypes N.5464-5490 in GM, 3 σ and 3 φ paratypes N.5492-5497 in AC; Sheduwa, 3000 m, 31.III-1.IV.1982, leg. A. & Z. Smetana, 1 σ and 2 φ paratypes N.5091-5093 in GM; Bakan, west Tashigaon, 3200 m, 5.IV.1982, leg. A. & Z. Smetana, 1 σ paratype N.5094 in GM; Induwa Khola valley, 2800 m, 15.IV.1984, leg. Löbl & Smetana, 1 σ and 1 φ paratypes N.5457-5458 in GM, 1 σ paratype N.5459 in AC; same data, 2000-2150 m, 18.IV.1984, 2 σ and 1 φ paratypes N.5460-5462 in GM, 1 φ paratype N.5463 in AC; south Mangsingma, 2200 m, 11.IV.1984, leg. Löbl & Smetana, 27 σ and 26 φ paratypes N.5388-5440 in GM, 7 σ and 6 φ paratypes N.5441-5453 in AC; same data, 2250-2300 m, 12.IV.1984, leg. Löbl & Smetana, 1 σ and 1 φ paratypes N.5454-5455 in GM, 1 σ paratype N.5456 in AC; Goru Dzire Dara, 3350 m, 9.IV.1984, leg. Löbl & Smetana, 2 σ and 1 φ paratypes N.5383-5385 in GM, 1 σ and 1 φ paratypes N.5386-5387 in AC.

Distribution: Nepal.

Collecting methods: Sifting plant debris on sandy ground; sifting humus near a spring, dead leaves, decaying wood and mosses near fallen trees.

Agathidium (s. str.) *bagmaticum* Ang. & Dmz.

Agathidium (s. str.) *bagmaticum* Angelini & De Marzo, 1985: 52.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 2 specimens in GM; Goropani, 2750 m, 5.X.1983, leg. Löbl & Smetana, 2 specimens in GM; same data, 2700 m, 6.X.1983, 1 specimen in GM; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 6 specimens in GM,

3 specimens in AC; south Goropani, 2700 m, 9.X.1983, leg. Löbl & Smetana, 1 specimen in GM; Patan distr., Bagmati prov., Phulcoki, 2600-2700 m, 14-15.X.1983, leg. Löbl & Smetana, 3 specimens in GM.

Collecting methods: Sifting rotten leaves, decaying wood, mosses and fungi in forests of rhododendrons and oak-tree, or at the foot of a very large fir-tree in marshy ground, or in a ravine with rhododendrons and maples; the species has been found in both damp and dry environments.

Distribution: Nepal.

***Agathidium* (s. str.) *glaciale* Ang. & Dmz.**

Agathidium (s. str.) *glaciale* Angelini & De Marzo, 1981: 235.

Agathidium (s. str.) *glaciale*: ANGELINI & DE MARZO 1983c: 9.

Material: NEPAL, Sindhupalchok distr., Bagmati prov., NE Barahbise, Amathal Khola, 3100 m, Tingsang, 27.X.1981, leg. Cassagnau, 1 specimen in GM; Tirkedunge, Deharveng, 1800-2000 m, 2.IX.1977, leg. Cassagnau, 1 specimen in GM; Sankhuwasawa distr., Kosi prov., Bikan, west Tashigaon, 3200-3600 m, 3-6.IV.1982, leg. A. & Z. Smetana, 10 specimens in GM, 2 specimens in AC; Sheduwa, 3000 m, 31.III-1.IV.1982, leg. A. & Z. Smetana, 10 specimens in GM, 4 specimens in AC; same data, 2100-2550 m, 9.IV.1982, 1 specimen in GM; NE Mangmaya, 2300 m, 6.IV.1984, leg. Löbl & Smetana, 4 specimens in GM, 1 specimen in AC; crest at NE of Mangmaya, 2500-2800 m, 7.IV.1984, leg. Löbl & Smetana, 17 specimens in GM, 4 specimens in AC; Induwa Khola valley, 2800 m, 15.IV.1984, leg. Löbl & Smetana, 7 specimens in GM, 2 specimens in AC; south Mangsingma, 2200 m, 11-13.IV.1984, leg. Löbl & Smetana, 21 specimens in GM, 5 specimens in AC; south Mangsingma, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 5 specimens in GM, 1 specimen in AC; Goru Dzire Dara, 3600 m, 9.IV.1984, leg. Löbl & Smetana, 1 specimen in GM; NE Kuwapani, 2500 m, 28.III.1982, leg. A. & Z. Smetana, 54 specimens in GM, 13 specimens in AC; same data, 2450-2600 m, 11-15.IV.1982, 52 specimens in GM, 13 specimens in AC; same locality, 2250-2400 m, 5-6.IV.1984, leg. Löbl & Smetana, 69 specimens in GM, 16 specimens in AC; same data, 2250-2400 m, 24.IV.1984, leg. Löbl & Smetana, 26 specimens in GM, 6 specimens in AC; Ahale, 2300-2400 m, 25-27.III.1982, leg. A. & Z. Smetana, 18 specimens in GM, 6 specimens in AC; Chichila, above Ahale, 2200 m, 4.IV.1984, leg. Löbl & Smetana, 20 specimens in GM, 5 specimens in AC.

Collecting methods: Sifting humus, dead leaves, decaying wood and mosses in both damp and dry environments.

Remarks: The characters of these new specimens are fully in agreement with the description of the types. A certain degree of variability affects the shape of both aedeagus apex and spermatheca. Length range: 2.45-2.95 mm.

Distribution: Nepal.

***Agathidium* (s. str.) *kathmanduense* Ang. & Dmz.**

Agathidium (s. str.) *kathmanduense* Angelini & De Marzo, 1981: 255.

Agathidium (s. str.) *kathmanduense*: ANGELINI & DE MARZO 1985: 55.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600 m, 20.IV.1982, leg. A. & Z. Smetana, 1 specimen in GM; same locality, 2600-2700 m, 13-16.X.1983, leg. Löbl

& Smetana, 4 specimens in GM, 2 specimens in AC; same data, 2500-2550 m, 29-30.IV.1984, 4 specimens in GM, 2 specimens in AC.

Collecting methods: Sifting dead leaves, decaying wood, mosses and fungi in both damp and dry environments.

Distribution: Nepal.

***Agathidium (s. str.) fulgens* Ang. & Dmz.**

Agathidium (s. str.) fulgens Angelini & De Marzo, 1985: 57.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2550-2600 m, 20.IV.1982, leg. A. & Z. Smetana, 2♂ and 1♀ paratypes in GM, 2♂ paratypes in AC; same data, 2550 m, 21.IV.1982, 1♀ paratype in GM; same data, 2600 m, 22.IV.1982, 1♀ paratype in GM (data already published in ANGELINI & DE MARZO 1985). Unpublished data: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600-2700 m, 15-16.X.1983, leg. Löbl & Smetana, 4 specimens in GM, 3 specimens in AC; same data, 2500-2700 m, 28-29.IV.1984, 4 specimens in GM, 2 specimens in AC.

Collecting methods: Sifting dead leaves, decaying wood, mosses and fungi, in both damp and dry environments.

Distribution: Nepal.

***Agathidium (s. str.) semireticulatum* Ang. & Dmz.**

Agathidium (s. str.) semireticulatum Angelini & De Marzo, 1981: 258.

Agathidium (s. str.) semireticulatum: ANGELINI & DE MARZO 1985: 59.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 8 specimens in GM, 3 specimens in AC; Goropani, 2700-2750 m, 5-6.X.1983, leg. Löbl & Smetana, 13 specimens in GM, 3 specimens in AC; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 4 specimens in GM, 2 specimens in AC; Sankhuwasawa distr., Kosi prov., crest at NE of Mangmaya, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 1 specimen in GM; crest at south of Mangsingma, 2800 m, 7.IV.1984, leg. Löbl & Smetana, 4 specimens in GM, 3 specimens in AC.

Collecting methods: Sifting dead leaves of rhododendron and bamboo near a spring and at the base of a very large rhododendron; sifting decaying wood, dead leaves, mosses and fungi near dead trunks of oak-trees and rhododendrons, or at the base of a large fir-tree in marshy ground; sifting litter in forest of rhododendron and fir-trees.

Remarks: These new specimens are fully similar to the types in colour, microreticulation and punctuation. Their body length reaches 2.9 mm.

Distribution: Nepal.

***Agathidium (s. str.) goropanicum* Ang. & Dmz.**

Agathidium (s. str.) goropanicum Angelini & De Marzo, 1981: 251.

Agathidium (s. str.) goropanicum: ANGELINI & DE MARZO 1983a: 168.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 38 specimens in GM, 9 specimens in AC; Goropani,

2700 m, 6.X.1983, leg. Löbl & Smetana, 1 specimen in GM; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 5 specimens in GM, 1 specimen in AC; south Goropani, 2700 m, 9.X.1983, leg. Löbl & Smetana, 1 specimen in GM.

Collecting methods: Sifting decaying wood, dead leaves, mosses and fungi near dead trunks of rhododendrons and oak-trees, or at the base of a large fir-tree in marshy ground; sifting litter in forest of rhododendrons and fir-trees, or in a ravine with rhododendrons and maples.

Remarks: These new specimens are similar to the types in colour and punctuation; their microreticulation is more impressed in the females; their body length reaches 2.6 mm.

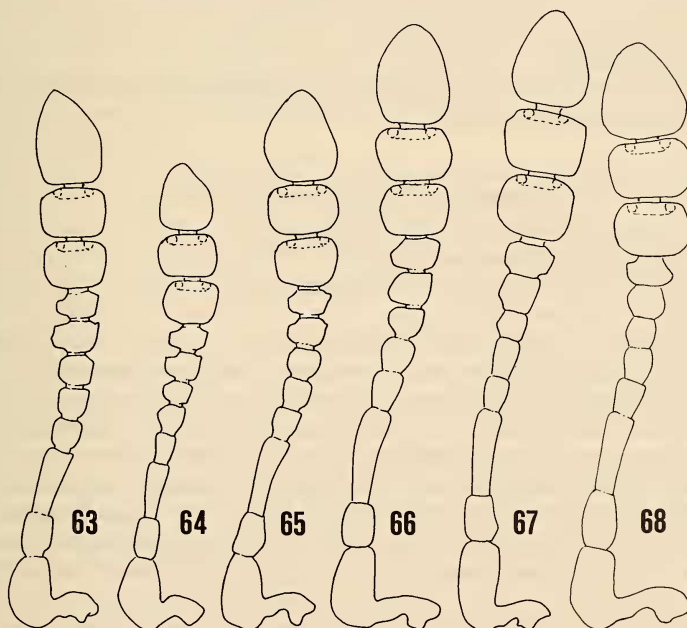
Distribution: Nepal.

***Agathidium (s. str.) variabile* n. sp.**

Figs 63, 71, 72, 83, 89, 90, 101

Length 2.50-2.55 mm (holotype σ 2.50 mm). Dorsum reddish-brown, darker at elytra; venter reddish-brown; antennae uniformly testaceous; legs testaceous. Whole dorsum with superficial microreticulation. Punctuation absent, except some very sparse and small punctures on head and pronotum of some paratypes.

Head: Microreticulation superficial but uniform. Clypeal line absent. 3rd antennal segment 1.4 times as long as the 2nd and as long as 4th+5th (fig. 63). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segment.



FIGS 63-68.

Antenna of: 63, *A. variabile* n. sp.; 64, *A. lividum* n. sp.; 65, *A. bidentatum* n. sp.; 66, *A. tridentatum* n. sp.; 67, *A. ovatum* n. sp.; 68, *A. macrotibiale* n. sp.

Pronotum: Microreticulation as that of head. 1.4 times as broad as head, moderately transverse ($W/L = 1.6$) and moderately convex ($W/H = 1.5$). Dorsal outline: fig. 71. Lateral outline: fig. 72. Holotype: length 0.80 mm, width 1.28 mm, height 0.85 mm.

Elytra: Microreticulation a little more impressed than that of pronotum. As broad as pronotum, as broad as long and moderately convex ($W/H = 1.7$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.18 mm, width 1.28 mm, height 0.75 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines absent, femoral lines complete.

Legs: Male hind femora with a weak distal tooth (fig. 83). Tarsal formula σ 5-5-4, Q 4-4-4.

Male copulatory organ (figs 89-90): Aedeagus very slender, with hook-like proximal part, lateral margins sinuate and convergent into a rounded tip, not deeply bifid ventral piece. Parameres slender, gently tapering towards apex.

Spermatheca (fig. 101): Basal and apical parts slender, different in length, similar in caliber.

Discussion: On the basis of the external characters, *A. variabile* n. sp. is similar to *A. goropanicum* Ang. & Dmz. (1981), except the more impressed microreticulation of head and pronotum, the colour of antennae and the lateral outline of pronotum. The male copulatory organ and spermatheca of these two species are sensibly different.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., crest at south of Mangsingma, 2800 m, 7.IV.1984, leg. Löbl & Smetana, holotype σ N.5255 and 1 σ paratype N.5256 in GM, 1 σ paratype N.5257 in AC; Induwa Khola valley, 2800 m, 15.IV.1984, leg. Löbl & Smetana, 1 σ and 1 Q paratypes N.5258-5259 in GM, 1 Q paratype N.5250 in AC.

Distribution: Nepal.

Collecting methods: Sifting dead leaves of rhododendrons and bamboo at base of rocks and of a large rhododendron.

Agathidium (s. str.) *franzi* Ang. & Dmz.

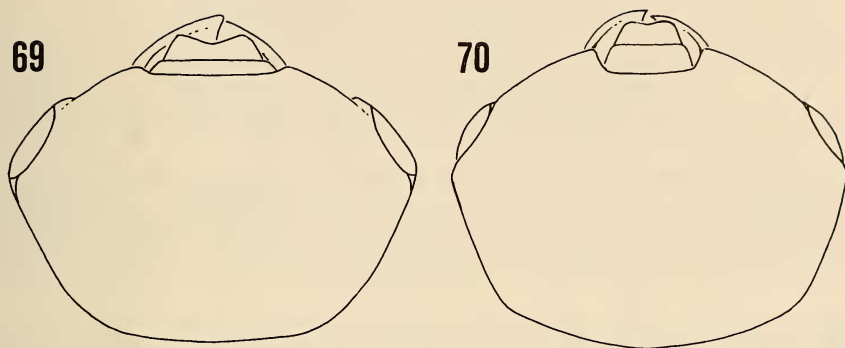
Agathidium (s. str.) *franzi* Angelini & De Marzo, 1981: 260.

Agathidium (s. str.) *franzi*: ANGELINI & DE MARZO 1983a: 172.

Material: NEPAL, Mustang distr., Dhaulagiri prov., 2 km north from Kalo Pani, 2550 m, 1.X.1983, leg. Löbl & Smetana, 8 specimens in GM, 2 specimens in AC; south Lete, 2500 m, 2.X.1983, leg. Löbl & Smetana, 17 specimens in GM, 3 specimens in AC; Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 20 specimens in GM, 4 specimens in AC; Goropani, 2700-2750 m, 5-6.X.1983, 24 specimens in GM, 5 specimens in AC; crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, 17 specimens in GM, 4 specimens in AC; south Goropani, 2700 m, 9.X.1983, leg. Löbl & Smetana, 13 specimens in GM, 2 specimens in AC; Manag distr., Gandaki prov., 4 km at SE of Pisang, 3050 m, 25.IX.1983, leg. Löbl & Smetana, 1 specimen in GM.

Collecting methods: Sifting decaying wood, rotten leaves and mosses, particularly at base of bamboos in forest of *Taxus*, or in forest of rhododendrons and oak-trees, or at the base of a very large fir-tree in marshy ground, or in a ravin with rhododendrons and maples.

Distribution: Nepal.



FIGS 69-70.

Head of: 69, *A. lividum* n. sp.; 70, *A. macrotibiale* n. sp.

***Agathidium* (s. str.) *lividum* n. sp.**

Figs 64, 69, 73, 74, 84, 91, 92, 102

Length 2.15-2.50 mm (holotype ♂ 2.15 mm). Dorsum uniformly reddish-brown; venter paler; antennae uniformly testaceous; legs reddish-brown. Microreticulation absent or only traces of it on head, weak on pronotum, impressed on elytra. Punctuation present only on head and pronotum.

Head: With traces of microreticulation in some paratypes. Punctures small and superficial, spaced from each other by 2-8 times their own diameter. Widest at level of the posterior margin of eyes (fig. 69). Clypeal line absent. 3rd antennal segment 1.3 times as long as the 2nd and shorter than 4th+5th (fig. 64). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

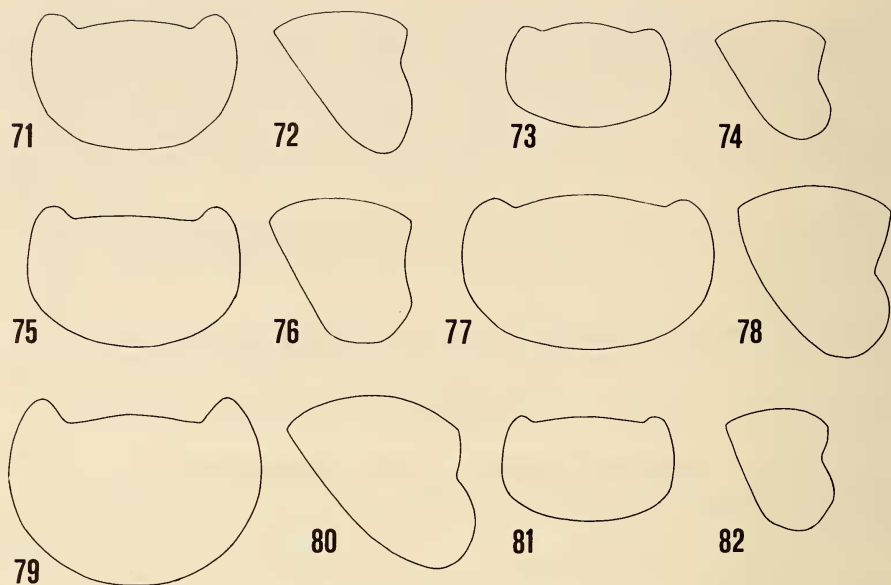
Pronotum: Microreticulation uniform but superficial. Punctures a little larger and more impressed than those of head, spaced from each other by 2-4 times their own diameter. 1.3 times as broad as head, moderately transverse ($W/L = 1.47$) and very convex ($W/H = 1.37$). Dorsal outline: fig. 73. Lateral outline: fig. 74. Holotype: length 0.70 mm, width 1.03 mm, height 0.75 mm.

Elytra: Microreticulation a little more impressed than that of pronotum. Punctuation absent. As broad as pronotum, as broad as long and moderately convex ($W/H = 1.77$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 0.95 mm, width 1.03 mm, height 0.56 mm.

Metathoracic wings absent. Meso- and metasternum: median carina absent, lateral lines incomplete, femoral lines complete.

Legs: Male hind femora with a weak distal tooth (fig. 84). Tarsal formula ♂ 5-5-4, ♀ 4-4-4.

Male copulatory organ (figs 91-92): Aedeagus slender, with twisted proximal part, lateral margins gently convergent into a small subacute tip, bifid ventral piece. Parameres slender, rounded at apex.



FIGS 71-82.

Dorsal and lateral outline of pronotum in: 71-72, *A. variabile* n. sp.; 73-74, *A. lividum* n. sp.; 75-76, *A. bidentatum* n. sp.; 77-78, *A. tridentatum* n. sp.; 79-80, *A. ovatum* n. sp.; 81-82, *A. macrotibiale* n. sp.

Spermatheca (fig. 102): Basal and apical parts slender; the former longer and larger in caliber.

Discussion: *A. lividum* n. sp. is closely related to *A. martensi* Ang. & Dmz. (1983a) and *A. dobaticum* Ang. & Dmz. (1985), owing to its partly microreticulate dorsum and absence of sutural striae; it differs from *A. martensi* in presence of distinct elytral microreticulation, from *A. dobaticum* in presence of microreticulation on pronotum and shape of male hind femora.

Types: NEPAL, Parbat distr., Dhaulagiri prov., crest at east of Goropani, 3100 m, 7.X.1983, leg. Löbl & Smetana, holotype ♂ N.5202 and 1 ♂ paratype N.5203 in GM, 2 ♂ paratypes N.5204-5205 in AC; Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 1 ♂ and 1 ♀ paratypes N.5206-5207 in GM, 1 ♀ paratype N.5208 in AC; Gorkha distr., Gandaki prov., Chuling Khola, Djinshi Kharka, 3400 m, 4-5.VIII.1983, leg. Martens & Daams, 1 ♂ paratype N.5498 in Senkenberg Museum; Chuling Khola, Meme Kharka, 3300-3400 m, 5-6.VIII.1983, leg. Martens & Daams, 1 ♂ paratype N.5499 in Senkenberg Museum, 1 ♀ paratype N.5500 in AC; Chuling Khola, south Kalo Pokhari, 3600 m, 7.VIII.1983, leg. Martens & Daams, 1 ♂ paratype N.5501 in AC.

Distribution: Nepal.

Collecting methods: Sifting mosses and litter in forest of rhododendrons and fir-trees.

Agathidium (s. str.) phulcokiense Ang. & Dmz.

Agathidium (s. str.) phulchokiense Angelini & De Marzo, 1981: 278.

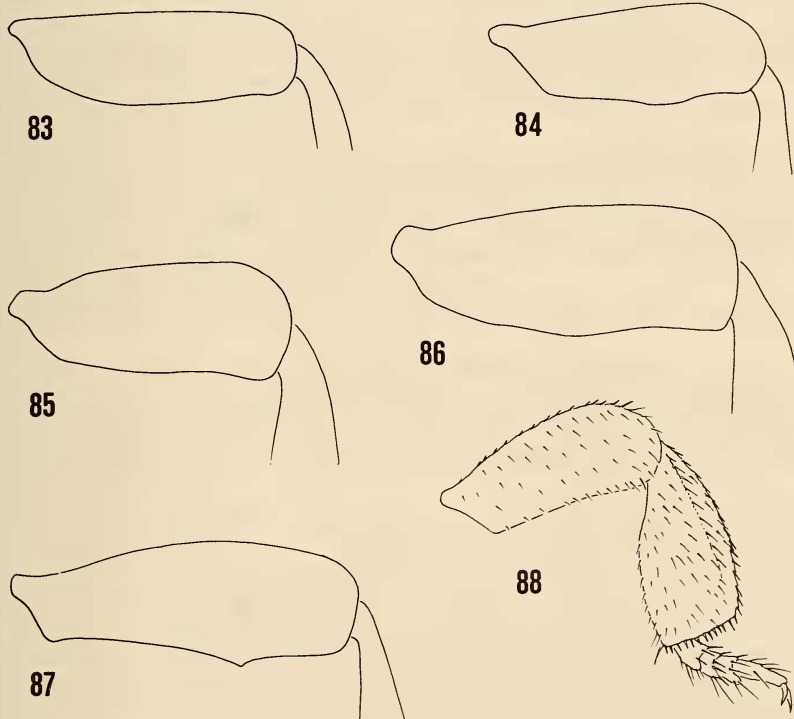
Agathidium (s. str.) phulchokiense: ANGELINI & DE MARZO 1983a: 172.

Agathidium (s. str.) phulcokiense: ANGELINI & DE MARZO 1985: 66.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2550-2600 m, 20-22.IV.1982, leg. A. & Z. Smetana, 25 specimens in GM, 6 specimens in AC; same locality, 2600-2700 m, 13-17.X.1983, leg. Löbl & Smetana, 39 specimens in GM, 8 specimens in AC; same data, 2500-2550 m, 28-30.IV.1984, leg. Löbl & Smetana, 72 specimens in GM, 23 specimens in AC.

Collecting methods: Sifting decaying wood, dead leaves, mosses and fungi on dead trunks in oak-forest; the species has been found in both damp and dry environments.

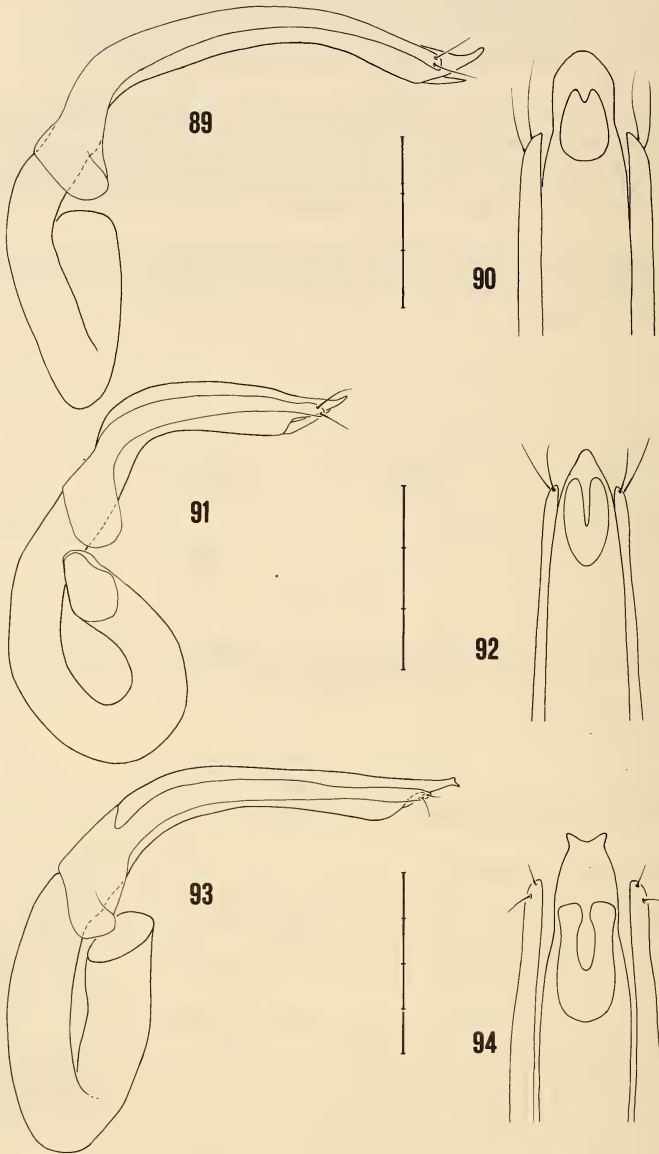
Distribution: Nepal.



FIGS 83-88.

Male hind femur of: 83, *A. variabile* n. sp.; 84, *A. lividum* n. sp.; 85, *A. bidentatum* n. sp.; 86, *A. tridentatum* n. sp.; 87, *A. ovatum* n. sp.

Femur, tibia and tarsus of hind leg of: 88, *A. macrotibiale* n. sp.



FIGS 89-94.

Male copulatory organ (lateral view and ventral view of apex) of: 89-90, *A. variabile* n. sp.; 91-92, *A. lividum* n. sp.; 93-94, *A. bidentatum* n. sp. Scale: 1 division = 0.1 mm.

***Agathidium* (s. str.) *bidentatum* n. sp.**

Figs 65, 75, 76, 85, 93, 94, 103

Length 2.60-2.95 mm (holotype ♂ 2.65 mm). Dorsum either uniformly black or dark reddish-brown, sometimes head reddish-brown but pronotum and elytra black; venter reddish-brown; antennae uniformly testaceous; legs reddish-brown. Microreticulation absent. Whole dorsum sparsely punctate.

Head: Punctures small and superficial, spaced from each other by 2-5 times their own diameter. Clypeal line absent. 3rd antennal segment twice as long as the 2nd and longer than 4th+5th (fig. 65). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures as small as those of head, but more irregularly spaced from each other. 1.3 times as broad as head, moderately transverse ($W/L = 1.58$) and moderately convex ($W/H = 1.5$). Dorsal outline: fig. 75. Lateral outline: fig. 76. Holotype: length 0.85 mm, width 1.35 mm, height 0.90 mm.

Elytra: Sometimes with traces of microreticulation. Punctures rather smaller and more superficial than those of head, spaced from each other by 1-10 times their own diameter. Just a little less broad than pronotum, nearly as broad as long ($W/L = 1.1$) and moderately convex ($W/H = 1.69$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.20 mm, width 1.32 mm, height 0.78 mm.

Metathoracic wings absent. Meso- and metasternum: median carina present, lateral lines absent, femoral lines complete.

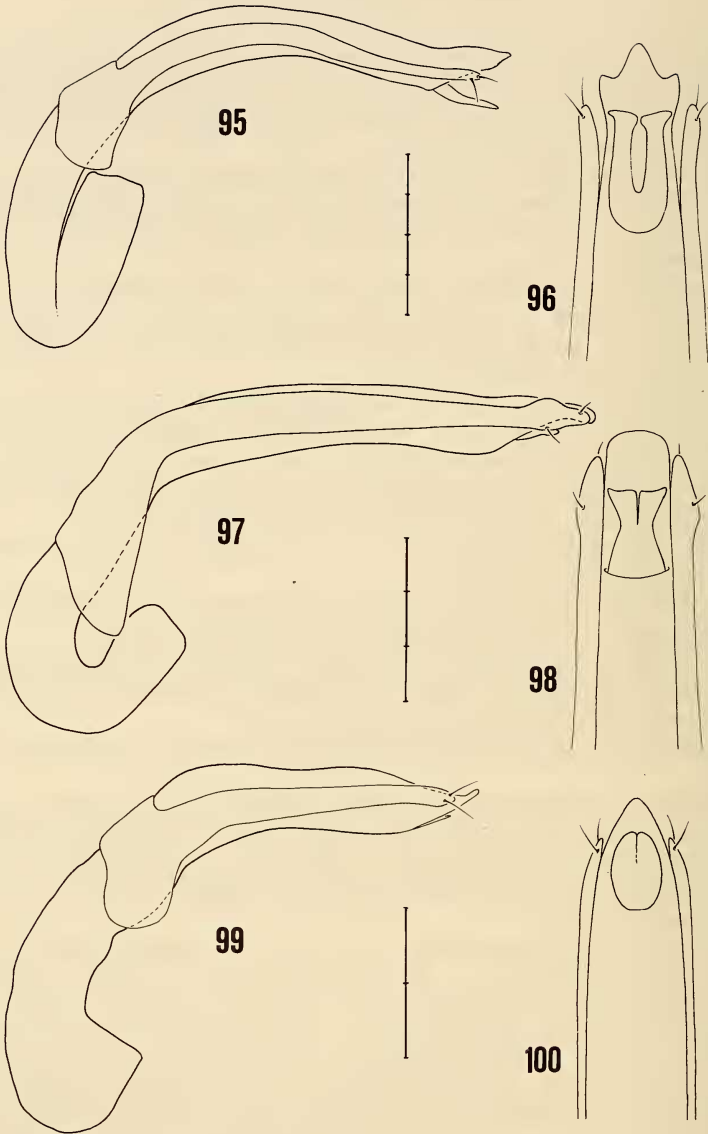
Legs: Male hind femora with a weak distal tooth (fig. 85). Tarsal formula ♂ 5-5-4, ♀ 5-4-4. Tarsomeres 1st and 2nd of each leg very enlarged in males.

Male copulatory organ (figs 93-94): Aedeagus slender, with ring-like proximal part, lateral margins sinuate and convergent into a truncate and bifurcate apex, bifid ventral piece. Parameres slender, gently tapering towards apex.

Spermatheca (fig. 103): Basal part pear-shaped; apical part slender, nearly constant in caliber.

Discussion: *A. bidentatum* n. sp. is closely related to *A. pseudoparia* Ang. & Dmz (1983a), *A. paria* Ang. & Dmz. (1981) and *A. tridentatum* n. sp., owing to absence of both dorsal microreticulation and sutural striae; it differs from *A. pseudoparia* in the length of femoral lines (complete), from *A. paria* in the shape of pronotum, from *A. tridentatum* in the denser punctuation.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2450 m, 13.IV.1982, leg. A. & Z. Smetana, holotype ♂ N.5169 in GM; same data, 2500 m, 11.IV.1982, 1 ♀ paratype N.5133 in GM, 1 ♀ paratype N.5134 in AC; same locality, 12.IV.1982, leg. A. & Z. Smetana, 1 ♀ paratype N.5131 in GM, 1 ♀ paratype N.5132 in AC; same locality, 2350-2400 m, 5.IV.1984, leg. Löbl & Smetana, 1 ♂ and 1 ♀ paratypes N.5261-5262 in GM, 1 ♂ paratype N.5263 in AC; same data, 2250-2400 m, 24.IV.1984, leg. Löbl & Smetana, 2 ♂ and 1 ♀ paratypes N.5300-5302 in GM, 1 ♀ paratype N.5303 in AC; NE Mangmaya, 2300 m, 6.IV.1984, leg. Löbl & Smetana, 1 ♂ paratype N.5264 in GM, 1 ♀ paratype N.5265 in AC; east Mangsingma, 1900 m, 19.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5299 in GM; Induwa Kola valley, 2000 m, 14.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5276 in GM, 1 ♂ paratype N.5277 in AC; same data, 2000-2050 m, 16.IV.1984, 4 ♂ and 1 ♀ paratypes N.5278-5282 in GM, 3 ♂ paratypes N.5283-5285 in AC; same data, 2100 m, 17.IV.1984, 3 ♂ and 2 ♀ paratypes N.5286-5290 in GM, 1 ♀ paratype N.5291 in AC; same data, 2100-2150 m, 18.IV.1984, 1 ♂ and 5 ♀ paratypes N.5292-5297 in GM, 1 ♂ paratype N.5298 in AC; south



FIGS 95-100.

Male copulatory organ (lateral view and ventral view of apex) of: 95-96, *A. tridentatum* n. sp.; 97-98, *A. ovatum* n. sp.; 99-100, *A. macrotibiale* n. sp. Scale: 1 division = 0.1 mm.

Mangsingma, 2200 m, 11.IV.1984, leg. Löbl & Smetana, 1 ♂ and 5 ♀ paratypes N.5266-5271 in GM, 3 ♀ paratypes N.5272-5274 in AC; same data, 2300 m, 12.IV.1984, 1 ♀ paratype N.5275 in GM.

Distribution: Nepal.

Collecting methods: Sifting decaying wood, dead leaves, humus and mosses in both damp and dry environments; sifting plant debris on sandy ground.

***Agathidium (s. str.) tridentatum* n. sp.**

Figs 66, 77, 78, 86, 95, 96

Length 3.05 mm (holotype ♂). Dorsum uniformly reddish-brown; venter paler; antennae uniformly testaceous; legs reddish-brown. Microreticulation absent. Punctuation fine and regular on the whole dorsum, sparser on elytra.

Head: Punctures small and superficial, spaced from each other by 4-5 times their own diameter. Clypeal line absent. 3rd antennal segment twice as long as the 2nd and as long as 4th + 5th (fig. 66). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures smaller than those of head, spaced from each other by 3-8 times their own diameter. 1.4 times as broad as head, moderately transverse ($W/L = 1.77$) and very convex ($W/H = 1.45$). Dorsal outline: fig. 77. Lateral outline: fig. 78. Holotype: length 0.90 mm, width 1.60 mm, height 1.10 mm.

Elytra: Punctures as small as those of pronotum, spaced from each other by 5-10 times their own diameter. As broad as pronotum, moderately broader than long ($W/L = 1.14$) and slightly convex ($W/H = 2$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.40 mm, width 1.60 mm, height 0.80 mm.

Metathoracic wings absent. Meso- and metasternum: median carina present, lateral lines absent, femoral lines complete.

Legs: Male hind femora without tooth (fig. 86). Tarsal formula ♂ 5-5-4, ♀ not known.

Male copulatory organ (figs 95-96): Aedeagus very slender, with hook-like proximal part, lateral margins sinuate behind a trifurcate apex; ventral piece bifid, with distally expanded arms. Parameres gently tapering towards apex.

Discussion: See discussion of *A. bidentatum* n. sp.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., Sheduwa, 3000 m, 2.IV.1982, leg. A. & Z. Smetana, holotype ♂ N.5170 in GM.

Distribution: Nepal.

***Agathidium (s. str.) ovatum* n. sp.**

Figs 67, 79, 80, 87, 97, 98, 104

Length 2.80-3.05 mm (holotype ♂ 3.05 mm). Dorsum uniformly reddish-brown or darker at elytra; venter reddish-brown; antennae darker at segments 9-11; legs testaceous. Microreticulation absent. Whole dorsum with impressed punctuation.

Head: Punctures somewhat large and impressed, spaced from each other by 3-4 times their own diameter. Clypeal line absent. 3rd antennal segment twice as long as the 2nd and longer than 4th + 5th (fig. 67). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctate as head. 1.5 times as broad as head, moderately transverse ($W/L = 1.48$) and very convex ($W/H = 1.48$). Dorsal outline: fig. 79. Lateral outline: fig. 80. Holotype: length 1.05 mm, width 1.56 mm, height 1.05 mm.

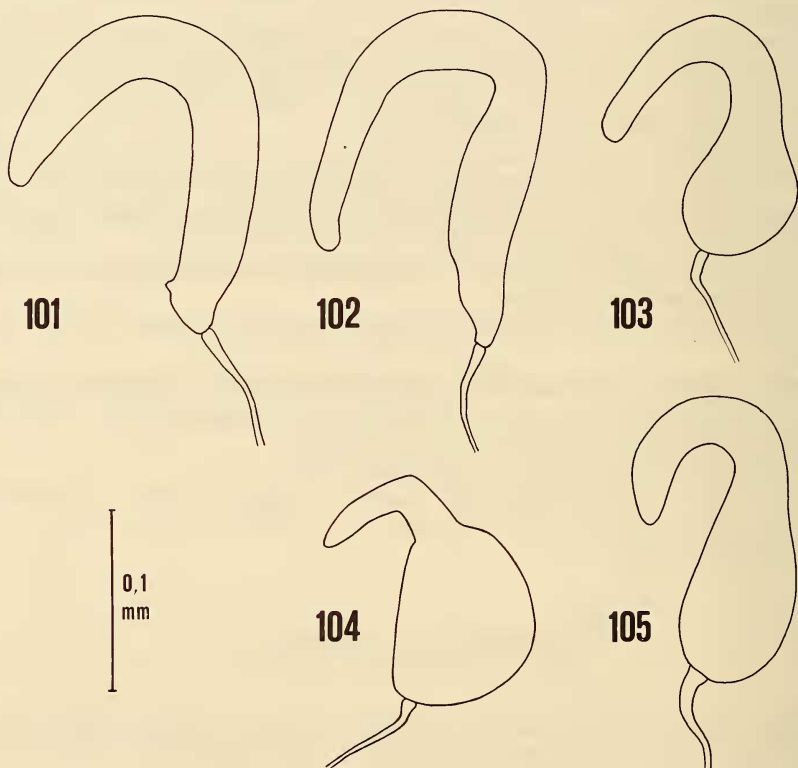
Elytra: Punctate as head. A little broader than pronotum, somewhat broader than long ($W/L = 1.25$) and slightly convex ($W/H = 1.88$). Lateral outline with slight humeral angle. Sutural striae absent. Holotype: length 1.35 mm, width 1.70 mm, height 0.90 mm.

Metathoracic wings present. Meso- and metasternum: median carina present, lateral lines incomplete, femoral lines incomplete.

Legs: Male hind femora with a subdistal tooth (fig. 87). Tarsal formula σ 5-5-4, φ 5-4-4.

Male copulatory organ (figs 97-98): Aedeagus very slender, with hook-like proximal part, lateral margins parallel, truncate apex, particularly shaped ventral piece. Parameres stout, clearly enlarged at apex.

Spermatheca (fig. 104): Basal part pear-shaped; apical part slender and short.



FIGS 101-105.

Spermatheca of: 101, *A. variabile* n. sp.; 102, *A. lividum* n. sp.; 103, *A. bidentatum* n. sp.; 104, *A. ovatum* n. sp.; 105, *A. macrotibiale* n. sp.

Discussion: *A. ovatum* n. sp. is closely related to *A. gurka* Ang. & Dmz. (1981) and *A. fulvum* Ang. & Dmz. (1981) owing to its black antennal club and presence of incomplete femoral lines; it differs from *A. gurka* in presence of metathoracic wings and lateral lines of mesosternum; from *A. fulvum* it differs also in size and colour of antennae.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., east Mangsingma, 1900 m, 19.IV.1984, leg. Löbl & Smetana, holotype ♂ N.5360 in GM; Induwa Kola valley, 2100 m, 17.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5363 in GM; south Mangsingma, 2200 m, 11.IV.1984, leg. Löbl & Smetana, 1 ♂ and 1 ♀ paratypes N.5361-5362 in AC.

Distribution: Nepal.

Collecting methods: Sifting rotten leaves, decaying wood and mosses.

***Agathidium (s. str.) rubrum* Ang. & Dmz.**

Agathidium (s. str.) rubrum Angelini & De Marzo, 1983c: 14.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Punhill near Goropani, 3050-3100 m, 8.X.1983, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC.

Collecting methods: Sifting litter and mosses in forest of rhododendrons and fir-trees.

Remarks: The characters of these new specimens are fully in agreement with those of the types.

Distribution: Nepal.

***Agathidium (s. str.) nepalense* Ang. & Dmz.**

Agathidium (s. str.) nepalense Angelini & De Marzo, 1981: 216.

Agathidium (s. str.) nepalense: ANGELINI & DE MARZO 1983c: 15.

Material: NEPAL, Parbat distr., Dhaulagiri prov., Goropani, 2700 m, 6.X.1983, leg. Löbl & Smetana, 1 specimen in GM, 1 specimen in AC.

Collecting methods: Sifting decaying wood, dead leaves, mosses and fungi in forest of rhododendrons and oak-trees.

Remarks: These new specimens are fully in agreement with the description of the types.

Distribution: Nepal.

***Agathidium (s. str.) minutissimum* Ang. & Dmz.**

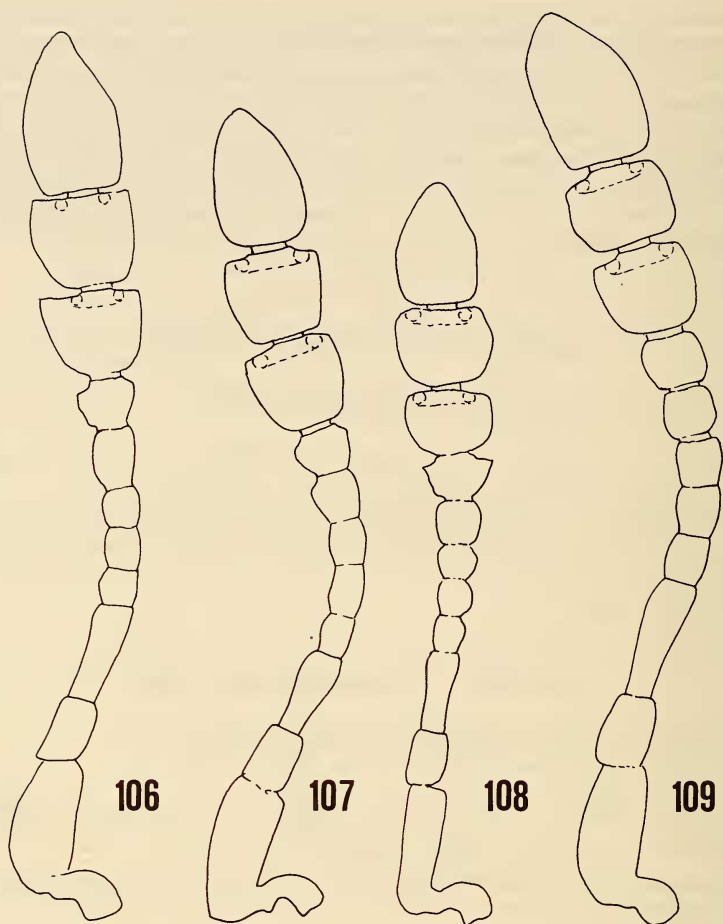
Agathidium (s. str.) minutissimum Angelini & De Marzo, 1981: 214.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600-2700 m, 14-15.X.1983, leg. Löbl & Smetana, 3 specimens in GM, 1 specimen in AC; same data, 2500-2550 m, 28-29.IV.1984, 1 specimen in GM, 1 specimen in AC.

Collecting methods: Sifting fungi on a dead oak trunk; sifting decaying wood in a very damp forest.

Remarks: The characters of these new specimens are fully in agreement with those of the types. The body length reaches 1.8 mm.

Distribution: Nepal.



FIGS 106-109.

Antenna of: 106, *A. taru* Ang. & Dmz. (♀); 107, *A. godawaricum* n. sp.; 108, *A. gracile* n. sp.; 109, *A. elegans* n. sp.

***Agathidium (s. str.) tibiale* Ang. & Dmz.**

Agathidium (s. str.) tibiale Angelini & De Marzo, 1985: 67.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2550 m, 30.IV.1984, leg. Löbl & Smetana, 1 specimen in GM.

Collecting methods: Sifting decaying wood covered by fungi and litter near a fallen oak trunk.

Distribution: Nepal.

Agathidium (s. str.) indra Ang. & Dmz.

Agathidium (s. str.) indra Angelini & De Marzo, 1984a: 549.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., hill at NE of Mangmaya, 2300 m, 6.IV.1984, leg. Löbl & Smetana, 1 specimen in GM, 1 specimen in AC.

Collecting methods: Sifting decaying wood and dead leaves in dry forest.

Remarks: These specimens are similar to the types in colour and punctuation characters; their body length reaches 2.2 mm.

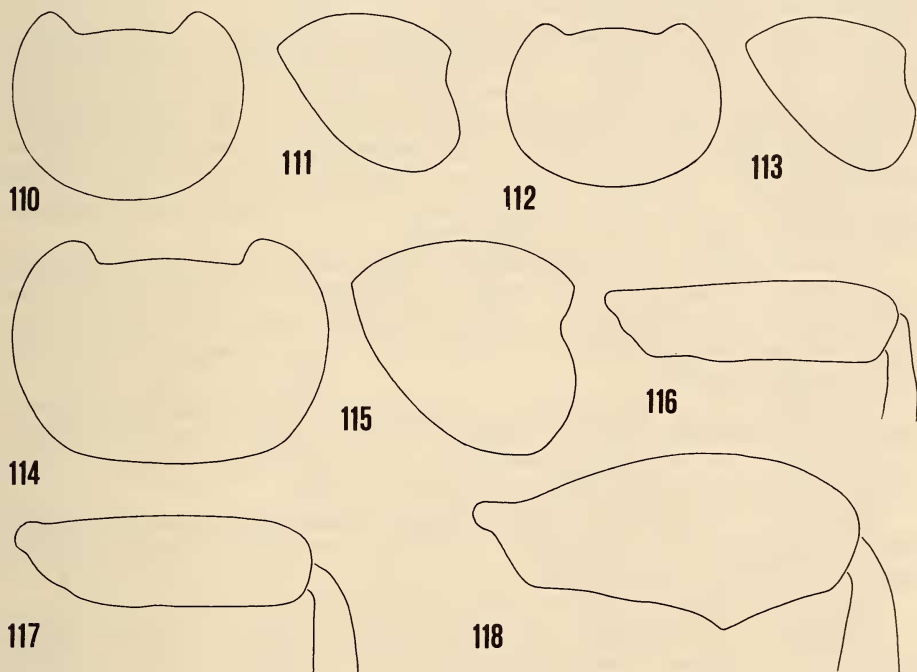
Distribution: Nepal, India (Darjeeling). New record for Nepal.

Agathidium (s. str.) pusillum Ang. & Dmz.

Agathidium (s. str.) pusillum Angelini & De Marzo, 1981: 217.

Agathidium (s. str.) pusillum: ANGELINI & DE MARZO 1984a: 551.

Agathidium (s. str.) pusillum: ANGELINI & DE MARZO 1985: 69.



FIGS 110-118.

Dorsal and lateral outline of pronotum in: 110-111, *A. godawaricum* n. sp.; 112-113, *A. gracile* n. sp.; 114-115, *A. elegans* n. sp. Male hind femur of: 116, *A. gracile* n. sp.; 117, *A. godawaricum* n. sp.; 118, *A. elegans* n. sp.

Material: NEPAL, Patan distr., Bagmati prov., Phulcoki, 2600 m, 16.X.1983, leg. Löbl & Smetana, 1 specimen in GM; same data, 2500 m, 28-29.IV.1984, 2 specimens in GM, 1 specimen in AC; Sankhuwasawa distr., Kosi prov., NE Kuwapani, 2450 m, 13.IV.1982, leg. A. & Z. Smetana, 1 specimen in GM; Ahale, 2400 m, 25.III.1982, leg. A. & Z. Smetana, 1 specimen in GM, 1 specimen in AC.

Collecting methods: Sifting decaying wood, dead leaves and mosses at base of rocks.

Remarks: These new specimens are fully alike to those we have examined up to now; their length reaches 2.2 mm.

Distribution: Nepal, India (Darjeeling).

***Agathidium (s. str.) macrotibiale* n. sp.**

Figs 68, 70, 81, 82, 88, 99, 100, 105

Length 2.05-2.30 mm (holotype ♂ 2.05 mm). Dorsum always reddish-brown at head, reddish-brown or black at pronotum and elytra; venter reddish-brown; antennae uniformly testaceous; legs testaceous. Microreticulation absent. Punctuation distinct and regular on head and pronotum, more superficial on elytra.

Head: Punctures small but impressed, spaced from each other by 3-4 times their own diameter. Widest behind eyes (fig. 70). Antero-lateral margins distinctly rimmed. Clypeal line absent. 3rd antennal segment 1.5 times as long as the 2nd and longer than 4th+5th (fig. 68). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Usually punctate as head; in some paratypes the punctuation is sparser and more impressed. 1.4 times as broad as head, moderately transverse ($W/L = 1.69$) and very convex ($W/H = 1.42$). Dorsal outline: fig. 81. Lateral outline: fig. 82. Holotype: length 0.63 mm, width 1.07 mm, height 0.75 mm.

Elytra: Punctures twice as large as those of head, scarcely impressed, spaced from each other by 1-2 times their own diameter. Just a little less broad than pronotum, moderately broader than long ($W/L = 1.14$) and moderately convex ($W/H = 1.79$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 0.91 mm, width 1.04 mm, height 0.58 mm.

Metathoracic wings absent. Meso- and metasternum: median carina present, lateral lines absent, femoral lines complete; males with a short tubercle between the metacoxae.

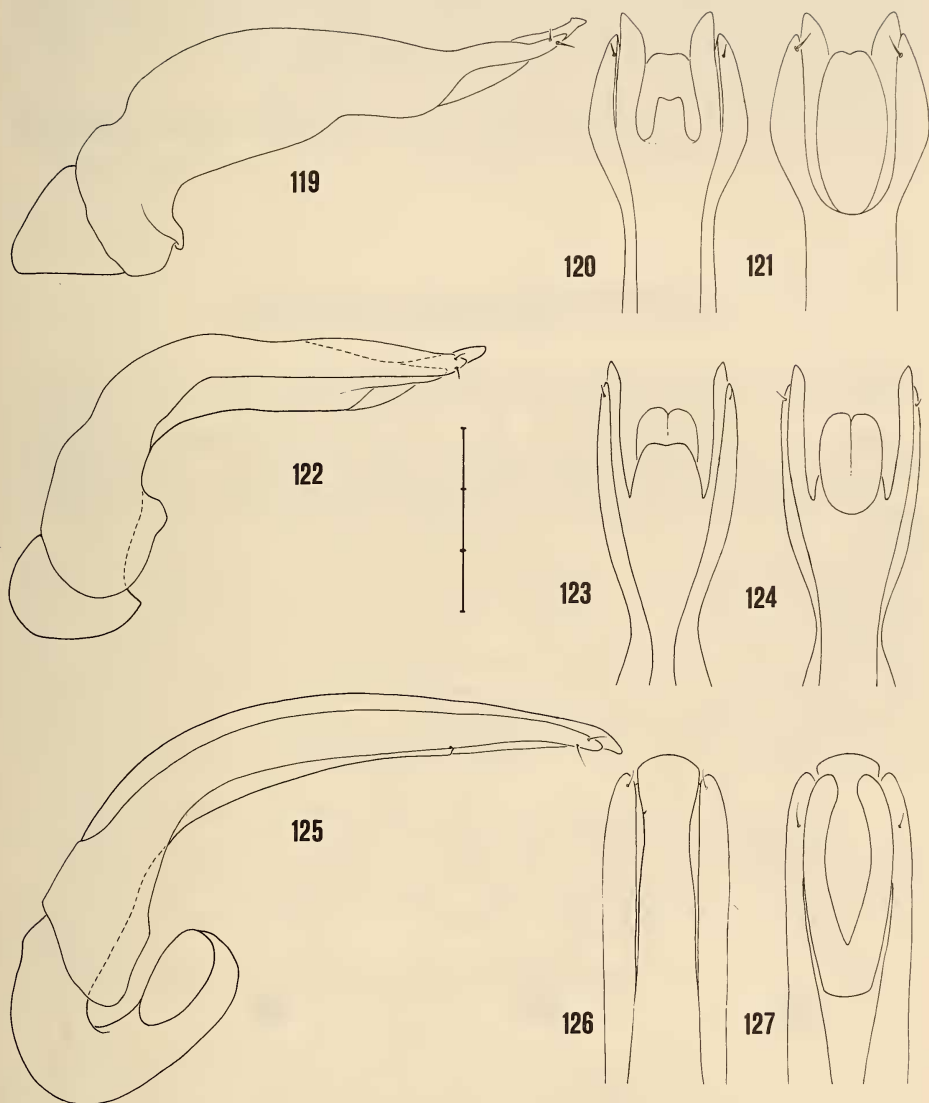
Legs: Male hind femora with a weak distal tooth (fig. 88). Tarsal formula ♂ 4-4-4, ♀ 4-4-4. Hind tibiae strongly dilated in both sexes (fig. 88).

Male copulatory organ (figs 99-100): Aedeagus slender, with proximal part simple, lateral margins gently convergent into a subacute tip, not bifid ventral piece. Parameres slender, gently tapering towards apex.

Spermatheca (fig. 105): Basal part pear-shaped; apical part slender and short.

Discussion: *A. macrotibiale* n. sp. is very similar in habitus and other external characters to *A. sikkimense* Ang. & Dmz. (1983b) and *A. pusillum* Ang. & Dmz. (1981), but it clearly differentiates itself by its dilated hind tibiae; it differs from *A. sikkimense* also in shape of eyes, whereas its difference with *A. pusillum* regards practically only the shape of the hind tibiae, being fully similar in both male copulatory organ and spermatheca.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., south Mangsingma, 2300 m, 13.IV.1984, leg. Löbl & Smetana, holotype ♂ N.5304 in GM, 1 ♂ paratype N.5305 in AC;



FIGS 119-127.

Male copulatory organ (lateral view and dorsal and ventral view of apex) of:
 119-121, *A. godawaricum* n. sp.; 122-124, *A. gracile* n. sp.; 125-127, *A. elegans* n. sp.
 Scale: 1 division = 0.1 mm.

same data, 2200 m, 11.IV.1984, 1 ♀ paratype N.5306 in GM, 1 ♀ paratype N.5307 in AC; NE Mangmaya, 2300 m, 6.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5309 in GM; Induwa Khola valley, 2000 m, 14.IV.1984, leg. Löbl & Smetana, 1 ♀ paratype N.5310 in GM; same data, 16.IV.1984, 1 ♂ and 1 ♀ paratypes N.5311-5312 in GM; same data, 2100 m, 17.IV.1984, 1 ♂ paratype N.5313 in GM, 1 ♀ paratype N.5314 in AC; NE Kuwapani, 2350 m, 5.IV.1984, leg. Löbl & Smetana, 1 ♂ paratype N.5308 in AC.

Distribution: Nepal.

Collecting methods: Sifting humus near a spring; sifting rotten leaves, decaying wood and mosses in both damp and dry environments.

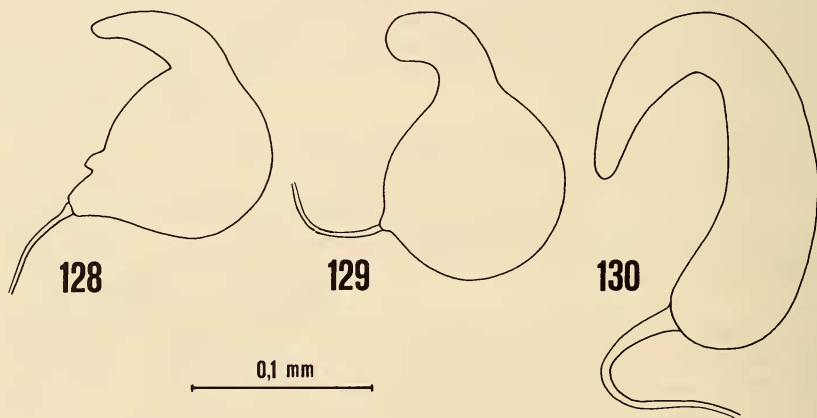
Agathidium (Microcele) taru Ang. & Dmz.

Figs 106, 128

Agathidium (s. str.) taru Angelini & De Marzo, 1983b: 160.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., Arun valley, south Num, 1050-1150 m, 20-21.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 1 specimen in AC.

Collecting methods: Sifting litter in dry forests; sifting dead leaves covering rocks in a ravine.



FIGS 128-130.

Spermatheca of: 128, *A. taru* Ang. & Dmz.; 129, *A. godawaricum* n. sp.;
130, *A. elegans* n. sp.

Remarks: *A. taru* has been described on the basis of one male, which showed an unusual 5-segmented antennal club. The new material, including 1♂ and 2♀, both confirms the mentioned antennal character and shows the presence of sexual antennal dimorphism in this species. In fact, the female antennae (fig. 106) have an usual 3-segmented club as those of most *Agathidium*. This is the first known instance of sexual antennal dimorphism in the tribe Anisotomini. Body length: 3.30-3.55 mm (holotype 3.75 mm). Dorsum darker at elytra. Punctuation finer and sparser than that of the holotype. Spermatheca (fig. 128): Basal part globose, with a short tubercle at the duct connection; apical part small. Tarsal formula ♀: 5-4-4.

Distribution: Nepal.

***Agathidium (Microcele) semirufum* Ang. & Dmz.**

Agathidium (s. str.) semirufum Angelini & De Marzo, 1981: 252.

Agathidium (s. str.) semirufum: ANGELINI & DE MARZO 1983b: 162.

Agathidium (s. str.) semirufum: ANGELINI & DE MARZO 1983c: 16.

Agathidium (s. str.) semirufum: ANGELINI & DE MARZO 1984a: 559.

Agathidium (s. str.) semirufum: ANGELINI & DE MARZO 1984b: 166.

Material: NEPAL, Patan distr., Bagmati prov., south Godawari, 1700 m, 19.X.1983, leg. Löbl & Smetana, 1 specimen in GM; Sankhuwasawa distr., Kosi prov., Sheduwa, 2550 m, 30.III.1982, leg. A. & Z. Smetana, 1 specimen in AC; same data, 2100-2550 m, 9.IV.1982, 1 specimen in GM; Aru River, Num, 1500-1600 m, 10.IV.1982, leg. A. & Z. Smetana, 1 specimen in GM, 1 specimen in AC; Arun valley, south Num, 1050-1150 m, 20-21.IV.1984, leg. Löbl & Smetana, 15 specimens in GM, 6 specimens in AC; east Mangsingma, 1900 m, 19.IV.1984, leg. Löbl & Smetana, 5 specimens in GM, 2 specimens in AC; Induwa Khola valley, 1750-2100 m, 14-18.IV.1984, leg. Löbl & Smetana, 19 specimens in GM, 6 specimens in AC; south Mangsingma, 2250 m, 11-13.IV.1984, leg. Löbl & Smetana, 1 specimen in GM, 1 specimen in AC.

Collecting methods: Sifting wet mosses near a spring, decaying wood and leaves at the forest edge or in a ravine or in dry forest; sifting plant debris on sandy ground.

Remarks: These new specimens are fully similar to the types in colour, punctuation and microsculpture of head. Body length: 2.55-3.45 mm. This species has been found in many localities and at very different altitudes (75-3400 m), in both very damp and dry environments.

Distribution: Nepal, India (Darjeeling, Assam), Bhutan.

***Agathidium (s. str.) godawaricum* n. sp.**

Figs 107, 110, 111, 117, 119, 120, 121, 129

Length 2.85-3.30 mm (holotype ♂ 2.85 mm). Dorsum of head reddish-brown, pronotum black or reddish-brown, elytra black or dark reddish-brown; venter dark reddish-brown; antennae with segments 9-10 darker; legs testaceous. Microreticulation absent,

head transversally striolate. Punctures very small on head and pronotum, nearly absent on elytra.

Head: Striolate uniformly but superficially. Punctures very small and sparse. Clypeal line reduced to two short crests, one at each side of clypeus. Anterior-lateral margins distinctly rimmed. 3rd antennal segment 1.5 times as long as the 2nd and shorter than 4th + 5th (fig. 107). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures very small and sparse. 1.7 times as broad as head, moderately transverse ($W/L = 1.31$) and very convex ($W/H = 1.38$). Dorsal outline: fig. 110. Lateral outline: fig. 111. Holotype: length 1.05 mm, width 1.38 mm, height 1.00 mm.

Elytra: Only some very small punctures. Just a little broader than pronotum, moderately broader than long ($W/L = 1.12$) and slightly convex ($W/H = 1.94$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.25 mm, width 1.40 mm, height 0.72 mm.

Metathoracic wings present. Meso- and metasternum: Median carina weak, lateral lines complete, femoral lines incomplete.

Legs: Male hind femora simple (fig. 117). Tarsal formula σ 5-5-4, φ 5-4-4.

Male copulatory organ (figs 119-121): Aedeagus comparatively stout, with proximal part simple, enlarged and trifurcate at apex, large and not bifid ventral piece. Parameres very large at base, abruptly tapered near apex, ventrally embracing the aedeagus at the ventral piece base.

Spermatheca (fig. 129): Basal part globose; apical part small.

Discussion: *A. godawaricum* n. sp. is very similar to *A. semirufum* Ang. & Dmz. (1981) in habitus, microsculpture, punctuation and characters of meso- and metasternum. These two species can be separated from each other on the basis of the shape of male hind femur and the aedeagus shape. The spermathecae are somewhat similar.

Types: NEPAL, Patan distr., Bagmati prov., Godawari, 1600 m, 31.III.1984, leg. Löbl & Smetana, holotype σ N.5319, 3 σ and 1 φ paratypes N.5320-5323 in GM, 2 σ and 1 φ paratypes N.5324-5326 in AC.

Distribution: Nepal.

Collecting methods: Sifting mosses and dead leaves in dry environment.

***Agathidium (Microcele) gracile* n. sp.**

Figs 108, 112, 113, 116, 122, 123, 124

Length 2.65-2.85 mm (holotype σ 2.85 mm). Dorsum reddish-brown, darker at elytra; venter reddish-brown; antennae uniformly testaceous; legs testaceous. Microreticulation absent; head transversally striolate in the anterior half. Punctuation nearly absent.

Head: Anterior half superficially striolate. Punctures very small and sparse. Clypeal line reduced to two short crest, one at each side of clypeus. Antero-lateral margins distinctly rimmed. 3rd antennal segment 1.7 times as long as the 2nd and longer than 4th + 5th (fig. 108). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures very small and sparse. 1.74 times as broad as head, moderately transverse ($W/L = 1.34$) and very convex ($W/H = 1.43$). Dorsal outline: fig. 112. Lateral outline: fig. 113. Holotype: length 1.01 mm, width 1.36 mm, height 0.95 mm.

Elytra: Punctures very small and sparse. Just a little less broad than pronotum, as broad as long and moderately convex ($W/H = 1.56$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.26 mm, width 1.30 mm, height 0.83 mm.

Metathoracic wings absent. Meso- and metasternum: median carina present, lateral lines absent, femoral lines incomplete.

Legs: Male hind femora simple (fig. 116). Tarsal formula ♂ 5-5-4, ♀ not known.

Male copulatory organ (figs 122-124): Aedeagus comparatively stout, with proximal part simple, apex trifurcate, split ventral piece. Parameres robust, gently tapering towards apex.

Discussion: *A. gracile* n. sp. has in common with *A. laticorne* Port. and *A. grouvellei* Port. the presence of head microsculpture; it differs in colour of dorsum and antennae and characters of the puncturation; from *A. laticorne* it differs also in the shape of male hind femora.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., Induwa Khola valley, 2100 m, 17.IV.1984, leg. Löbl & Smetana, holotype ♂ N.5327 in GM, 1 ♂ paratype N.5328 in AC.

Distribution: Nepal.

Collecting methods: Sifting mosses and dead leaves at the base of rocks.

***Agathidium (Microcele) laticorne* Port.**

Agathidium (Cyphocele) laticorne Portevin, 1922: 58.

Agathidium (Microcele) laticorne: ANGELINI & DE MARZO 1986a: 442.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., Sheduwa, 2100-2550 m, 9.IV.1982, leg. A. & Z. Smetana, 2 specimens in GM; Arun valley, south Num, 1050-1150 m, 20-21.IV.1984, leg. Löbl & Smetana, 3 specimens in GM, 2 specimens in AC; Induwa Khola valley, 2000 m, 16.IV.1984, leg. Löbl & Smetana, 1 specimen in GM; Pangma, 1700 m, 4.IV.1984, leg. Löbl & Smetana, 2 specimens in GM; Khandbari, 1700 m, 23.III.1982, leg. A. & Z. Smetana, 1 specimen in GM, 1 specimen in AC.

Collecting methods: Sifting decaying wood, dead leaves and mosses in dry environment.

Remarks: This species has been found in many localities and at very different altitudes (75-3500 m); the collecting data suggest that it occurs prevalently in dry forests. We have recently redescribed it, and these new specimens are fully in agreement with the redescription. Body length: 2.95-3.45 mm.

Distribution: Pakistan, Nepal, Bhutan, India (Garhwal, Kumaon, Darjeeling, Assam, Meghalaya, Tamil Nadu, Kerala), Sri Lanka, Viet Nam, Malaysia (Malaya, Sarawak), Indonesia (Sumatra, Java).

***Agathidium (Microcele) tonkinense* Ang. & Cooter**

Agathidium (s. str.) tonkinense Angelini & Cooter, 1986: 39.

Agathidium (Microcele) tonkinense: ANGELINI & DE MARZO 1986a: 447.

Material: NEPAL, Sankhuwasawa distr., Kosi prov., Arun valley, south Num, 1050 m, 22.IV.1984, leg. Löbl & Smetana, 2 specimens in GM, 2 specimens in AC.

Collecting methods: Sifting decaying wood and leaves in damp forest of palms.

Remarks: These new specimens have been collected at comparatively low altitude (types from Assam: 2000 m); their characters are fully in agreement with those of the types. Body length: 3.05-3.15 mm.

Distribution: Nepal, India (Assam), Viet Nam. New record for Nepal.

Agathidium (Microceble) elegans n. sp.

Figs 109, 114, 115, 118, 125, 126, 127, 130

Length 3.75-4.10 mm (holotype ♂ 3.95 mm). Head reddish-brown, pronotum black with sides reddish-brown or entirely reddish-brown, elytra black or reddish-brown; venter reddish-brown; antennae with black club; legs reddish-brown. Microreticulation absent. Whole dorsum finely and sparsely punctate.

Head: Punctures moderately small, impressed, spaced from each other by 3-4 times their own diameter. Clypeal line reduced to two short crests, one at each side of clypeus. Antero-lateral margins distinctly rimmed. 3rd antennal segment 1.6 times as long as the 2nd and longer than 4th+5th (fig. 109). Hamann's organ: gutter without vesicles in both 9th and 10th antennal segments.

Pronotum: Punctures clearly smaller than those of head, superficial, spaced from each other by 6-10 times their own diameter. 1.85 times as broad as head, moderately transverse ($W/L = 1.44$) and very convex ($W/H = 1.44$). Dorsal outline: fig. 114. Lateral outline: fig. 115. Holotype: length 1.35 mm, width 1.95 mm, height 1.35 mm.

Elytra: Punctures as large as those of head, superficial, spaced from each other by 4-8 times their own diameter. As broad as pronotum, as broad as long and moderately convex ($W/H = 1.77$). Lateral outline with weak humeral angle. Sutural striae absent. Holotype: length 1.78 mm, width 1.95 mm, height 1.10 mm.

Metathoracic wings present. Meso- and metasternum: median carina present, lateral lines vague, femoral lines incomplete.

Legs: Male hind femora with a subdistal tooth (fig. 118). Tarsal formula ♂ 5-5-4, ♀ 5-4-4.

Male copulatory organ (figs 125-127): Aedeagus very slender, with hook-like proximal part, lateral margins sinuate, spatula-like apex, bifid ventral piece. Parameres slender, gently tapering towards apex.

Spermatheca (fig. 130): Basal and apical slender, different in length and caliber.

Discussion: *A. elegans* n. sp. is very similar in its external features to *A. mussardi* Ang. & Dmz. (1986a), *A. biimpressum* Champ. (ANGELINI & DE MARZO 1986a), *A. andrewesi* Port. (ANGELINI & DE MARZO 1986a) and *A. brahma* Ang. & Dmz. (1985), but it sets apart by its larger size.

Types: NEPAL, Sankhuwasawa distr., Kosi prov., Arun valley, south Num, 1050 m, 21.IV.1984, leg. Löbl & Smetana, holotype ♂ N.5329, 3♂ and 6♀ paratypes N.5330-5338 in GM, 2♂ and 2♀ paratypes N.5339-5342 in AC; same data, 1100 m, 1♂ and 4♀ paratypes N.5343-5347 in GM, 1♂ paratype N.5348 in AC; same data, 1050 m, 20.IV.1984, 3♂ and 5♀ paratypes N.5349-5356 in GM, 1♂ and 2♀ paratypes N.5357-5359 in AC; Sheduwa, 2550 m, 30.III.1982, leg. A. & Z. Smetana, 1♀ paratype N.5136 in AC; NE Kuwapani, 2450 m, 11.IV.1982, leg. A. & Z. Smetana, 1♀ paratype N.5135 in GM.

Distribution: Nepal.

Collecting methods: Sifting decaying wood and dead leaves in both damp and dry forests.

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